

5—FACTS—5

"Coffee which makes the politician wise,
And see through all things with his half-shut eyes."—*Pope*.

1.—THAT THOS. SYMINGTON & CO.'S "EDINBURGH" COFFEE ESSENCES
have the Largest Family Sale throughout the World. Pure
and Strong.

"The most delicious and the rarest beverage in the world."—*Disraeli*.

2.—THAT their DANDELION COFFEE ESSENCE affords great Relief to
Sufferers from Biliousness or Indigestion, and is highly praised.

"One sip of this will bathe the drooping spirits in delight
Beyond the bliss of Dreams. Be wise, and taste!"—*Milton*.

3.—THAT their "PYRAMID" MALT EXTRACT contains more active
principle (*Diastase*) than any other kind, and is therefore invaluable
for strengthening delicate Children and Invalids.

"Cull'd from sheaves of August gold."—*Inon*.

**4.—THAT "for the Table, the Nursery, or the Sick Room, these pre-
parations are indispensable."**

**5.—THAT those who sell or use all or any of them will favourably
remember**

SYMINGTON, EDINBURGH.

13—GOLD AND SILVER MEDALS—13

Have been Awarded the following Specialities of

THOS. SYMINGTON & CO., EDINBURGH,

For Purity and Excellence of Quality:—

Essence of Pure Coffee	...	...	...	...	In 6d., 1s., and 2s. Bottles.
Do. Coffee and Chicory	...	...	...	...	In do. do.
Do. Dandelion Coffee	...	...	...	...	In 1s. and 2s. Bottles.
"Edinburgh" Coffee and Milk	...	...	...	...	In 1-lb. Tins.
"Edinburgh" Chocolate and Milk	...	...	...	...	In do.
"Edinburgh" Cocoa and Milk	...	...	...	...	In do.
Prepared Taraxacum (Dandelion)	...	...	...	...	In $\frac{1}{4}$ and $\frac{1}{2}$ lb. Tins.
Do. do. with Pure Coffee	...	...	...	...	In do. do.
"Pyramid" Malt Extract	...	...	...	...	In 8-oz. (fluid) Bottles.
Do. do. with Cod Liver Oil	...	...	...	...	In do. do.

THOS. SYMINGTON & CO., 61 LEADENHALL ST., E.C.
HEAD OFFICE AND WORKS—BEAVERBANK, EDINBURGH.

Fletchers' Concentrated Liquors

IMAGINARY CONVERSATIONS.

(With Apologies to the Shade of W. S. Landor.)

Scene.—A modern Pharmacy. *Dramatis Personæ.*—
Dr. BRAIN (a leading physician); Mr. SUMBUL (a front-rank pharmacist).

"Good morning, Dr. Brain."

"Do you know, Mr. Sumbul, I've almost decided to give up prescribing fresh Infusions? People are getting so fastidious about their medicine. So many of my lady patients say, 'Doctor, I can't take that horrid muddy-looking stuff you prescribed for me last week. Can't you give me something nice and bright, so that I can persuade myself it's a glass of sherry?'"

"Yes, doctor, the public seem determined to be dosed æsthetically or not at all."

"And then, Mr. Sumbul, I'm inclined to think that the idea of extracting the active principles of a drug by simply soaking it in boiling water is, after all, somewhat barbaric."

"Undoubtedly the process is crude in the extreme. It is a relic, in fact, of a period when the Art of Pharmacy was unknown."

"That is indisputable; but at the same time I am at my wit's end to know what to prescribe in place of them."

"Well, doctor, have you tried Concentrated——"

"Now, for heaven's sake, Mr. Sumbul, don't suggest Concentrated Infusions. I should lose half my patients in less than a week. I come across the concoctions occasionally at the Hospital, though the Dispenser told me the other day he should only keep one of them in future, for they were all alike, and Buchu did just as well either for Orange, or Calumba, or Gentian."

"A very good joke, doctor, if there were less truth in it. No; I was about to ask if you had tried FLETCHERS' CONCENTRATED LIQUORS."

"No. I've never seen them. Are they made by the same firm which manufacture FLETCHERS' SYRUPS OF THE HYDROBROMATES?"

"Yes, and I can show you some of them if you will come round to the dispensing counter."

"Thank you. I am always interested in any new improvement."

"Here, doctor, is FLETCHERS' LIQUOR BUCHU. A fluid ounce of LIQUOR makes a pint of Infusion. They are all the same strength."

"How convenient! But do you think the concentration can be carried to such an extent without injury?"

"O, yes, doctor, I think there's little doubt of that. The makers guarantee that *no heat whatever* is employed throughout the process, which is based on the principle of cold repercolation."

"What a splendid idea; I wonder no one ever thought of it before."

"Well, several have *since*, and so there are lots of imitations, some of them much cheaper, but I've never seen any LIQUORS fit to compare with FLETCHERS'."

"Perhaps not, but you know, Mr. Sumbul, the proof of the pudding is in the eating."

"It is, doctor, and suppose we apply the same test to these LIQUORS. Into this beaker I have measured 19 drachms of distilled water, and will now add 1 drachm of LIQUOR BUCHU. There!"

"Well, the solution is certainly beautifully clear, and what a delightful aroma. And the taste is simply perfect. How fresh, pungent, and aromatic."

"Yes. I know of no other preparation of Buchu so elegant. Then here are the LIQUORS of Chiretta, Gentian, Orange and Cascarilla. See, I have diluted them all, and the Infusions produced are not only brilliant, but are as pure and delicate in flavour as the Buchu."

"Mr. Sumbul, I am delighted with them. Never make a single ounce of fresh Infusion for any of my patients again. And, if you take my advice, you'll throw all your old stock of Concentrated Infusions down the sink."

"That I have already done, doctor, but here on the desk is FLETCHERS' 'Portfolio' containing full information about all their LIQUORS."

"What a capital book. Why, they seem to make LIQUORS for TINCTURES too."

"O, yes. I make all my Tinctures that way now. All you have to do is to take a measured volume of LIQUOR and then add to it either Proof or Rectified Spirit, as the Pharmacopœia directs, and there you have your Tincture, either much or little, ready at a moment's notice."

"I should like to see some Tinct. Card. Co. and some Tinct. Gentianæ Co. made from these LIQUORS."

"With pleasure, doctor. Here they are. These have been made about a week. I always notice that the Tinctures improve very much by keeping. When first mixed you can sometimes scarcely smell anything but spirit, but in a day or two the pure aroma of the drug is fully developed. In this respect they seem to behave like perfumes."

"Well, Mr. Sumbul, I never wish to see any better Tinctures than these. They are all that could be desired in appearance, aroma and flavour. By the way, how useful these LIQUORS would be in the Hospital!"

"Yes, they take up so little room."

"Ah, but I don't mean that only. Why shouldn't the LIQUORS be dispensed just as they are, or, at any rate, those that are miscible with water. Just think what a quantity of spirit they would save. I believe our Tinctures cost us about £400 a year. It seems to me that by using FLETCHERS' LIQUORS we ought to save something like £300, which we now spend in dosing the patients with alcohol."

"You have certainly hit the nail, doctor, and the only difficulty I can see is in convincing your committee that the difference is worth saving."

"Look here, Mr. Sumbul, send up to the Hospital some samples of each of the LIQUORS you've been showing me, and I'll bring them before the committee myself at next week's meeting. Why, bless my soul, these LIQUORS will be as valuable to us as our share of the Hospital Sunday Fund."

Fletcher, Fletcher & Stevenson, Manufacturing Chemists.
Offices, 21 Mincing Lane, E.C. Works, Holloway, London, N.

"CONCILIO ET LABORE."

THE
MANCHESTER COLLEGE
OF PHARMACY,
225 and 227a OXFORD STREET,
MANCHESTER.

At the July Examinations the under-named Thirteen Students from the M. C. P. passed the Minor; Seven at their first attempt and Five at the second.

Mr. A. BENNETT	Mr. A. BETHELL
" C. FIELDING	" R. COLLINGWOOD
" C. GARTSIDE	" F. GARTSIDE
" J. MCFALL	" G. JOHNSON
" L. SELLE	" H. TINKER
" J. HUNT	" J. SWINGLEHURST
Mr. J. EVANS.	

The NEXT SESSION will begin on SEPTEMBER 1st.
Copyright Prospectus will be sent on application.

SEE LAST WEEK'S ADVERTISEMENT.

THE LIVERPOOL SCHOOL OF PHARMACY,
24 NEWINGTON, LIVERPOOL.

Principal—Mr. J. S. WARD, Ph. Ch., F.C.S., &c.

MINOR PASS LIST FOR JULY.

Mr. A. GORDON	Mr. G. M. SLEGGs
" H. K. JONES	" A. THOMSON
" J. PRICE	" F. WALKER
" T. E. RIDDLE	" D. T. WILKIE

Seven of these passed at their first attempt.

During the past Session 28 have passed the Minor from this School, 19 of them at their first attempt.

The next Session begins on September 1. Syllabus, Pass List, Fees, &c., free on application to the Principal.

Now Ready, Second Edition, Crown 8vo., price 5s.

**A PRACTICAL MANUAL OF VENEREAL
AND GENERATIVE DISEASES:**

Including SPERMATORRHOEA, PROSTATORRHOEA, IMPOTENCE,
and STERILITY in Both Sexes.

By **M. K. HARGREAVES, M.D.**

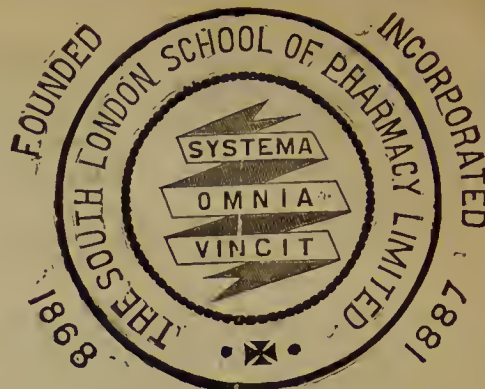
Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 162 WARDOUR STREET, LONDON, W.

PRIZE MEDAL, PARIS EXHIBITION, 1889.



ZUCCATO & WOLFF, 12 CHARTERHOUSE STREET, LONDON, E.C.



325 KENNINGTON ROAD, S.E.

LECTURERS—

Chemistry, Physics, and Botany,

DR. MUTER, F.R.S.E., F.I.C., F.C.S.

Materia Medica and Pharmacy,

MR. DODD, F.C.S.

Analytical Chemistry,

MR. DE KONINGH, F.I.C., F.C.S.

Classics, and Mathematics and Mechanics,

MR. TOWNSEND, A.C.P. and London Mat.

Assisted by an efficient staff of Demonstrators.

The fees at this School are absolutely inclusive, and there are no extras of any kind. The Directors spare no expense in rendering the education thoroughly efficient and in maintaining the very high percentage of success uniformly obtained by the students for the last 20 years. The Dispensing department is most commodious and perfect, and no extra charge is made for its use.

The new Laboratory for practical instruction in Manufacturing Pharmacy is now in full work.

The School being usually full, intending students should secure their places beforehand.

For syllabus, &c., apply by letter addressed to the Secretary.

OWENS COLLEGE
MANCHESTER.

The Prospectus of the PHARMACEUTICAL Department, containing information concerning College Classes qualifying for the Major and Minor Examinations, is now ready.

ENTRANCE SCHOLARSHIPS, PRIZES, &c., ARE OFFERED.

For Full Particulars apply to

HENRY WM. HOLDER, M.A., REGISTRAR.

LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD EMBURY. Chairman—MAJOR WM. VAUGHAN MORRAN.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.

PRINT YOUR OWN NOTICES, CIRCULARS, PRICE LISTS, &c.
SIMPLE, CLEANLY, RELIABLE, CHEAP.

Price from 25s.

PAYS FOR ITSELF AFTER A FEW TIMES USING.

5,000 Copies can be produced from one writing. Is invaluable to Chemists and Druggists for the rapid production of Price Lists, Circulars, &c., &c. Full particulars, with specimens of work. Testimonials, &c., on application to the Manufacturers and Patentees—

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, AUGUST 2, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

ADVERTISEMENTS for this Supplement can be received on FRIDAY MORNING, first post, though it is requested the these may be sent in as early in the week as possible.

EXCHANGE COLUMN ADVERTISEMENTS will appear on page 10 (bottom folio), and must be received not later than THURSDAY AT NOON, to appear in the next issue.

All Advertisements for this Supplement and Exchange Column must be prepaid. Remittances payable to EDWARD HALSE and crossed MARTIN & Co.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1848, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, N.—Dispensing and Retail, with Post attached; returns from business nearly £500; post-office more than pays rent; profits about £250; well-fitted shop and large stock; comfortable house with garden; about £375 required.

2.—LONDON SUBURB, WEST.—Dispensing, Retail and Prescribing Business; returns about £250; rapidly increasing; double-fronted corner shop; good stock; comfortable house, low rental; price £450.

3.—LONDON, N.—Prescribing and Retail; situated in a thickly-populated locality; returns over £400 yearly, *net profit nearly half*; corner shop; rent low; price £350, or reasonable offer considered.

4.—LONDON, N.W.—Retail and Prescribing Business; been conducted as a Branch; managed entirely by an assistant; returns nearly £650; good prices; handsomely-fitted shop and good stock; commodious house and garden attached; about £450 required.

5.—KENT.—Retail and Prescribing of good-class (unopposed); returns nearly £600; *net profit* £250; well-fitted shop and large stock, at low rental; convenient house, good garden attached; about £600 required.

6.—HOME COUNTY.—Retail and Dispensing of good class; situate in attractive locality; returns nearly £700, *with good profits*; large shop, well stocked; convenient house, &c.; about £650 required.

7.—EASTERN COUNTIES.—Mixed Business; returns last year £2,000, increasing; large well-fitted shop and good stock; small premium only and valuation required.

8.—SOUTH-WEST OF ENGLAND (Seaside).—Good class Retail and Dispensing Business; held by vendor 12 years; returns nearly £550, *with good profits*; large 10-roomed house; every investigation permitted; vendor, having purchased a larger business, will deal liberally with an immediate purchaser.

9.—NORTH DEVON.—Country town; good-class Retail, Dispensing, and Prescribing; returns £450 yearly, increasing; satisfactory reasons for selling; opposition slight; rent £20; price £300.

10.—SOUTH WALES (Seaport).—Retail and Dispensing; well-fitted single-fronted shop and good stock; moderate rent; returns nearly £500, capable of being much increased; vendor, being anxious for an early sale, will accept £350.

11.—YORKSHIRE.—Large manufacturing town; good-class Retail and Light Family Business; returns about £1,000 yearly; large handsome shop and good stock; commodious house, rent £55; large flower and vegetable gardens, stable, and warehouse; about £800 required.

12.—OXFORDSHIRE.—Mixed Business, Post-office attached; returns about £2,000 yearly; business capable of being much increased; well-fitted shop and good stock; reasonable offer accepted.

13.—SOMERSET.—Very old-established Business for disposal, in consequence of vendor's ill-health; returns over £1,100 yearly, *profits more than the average*; a prompt purchaser required, terms liberal; particulars on application.

14.—WILTS.—Mixed Business; returns nearly £1,300 yearly; large and commodious premises; good house and garden; about £1,100 required.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT,

VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

GLOUCESTERSHIRE.—Fashionable town; first-class Retail, Dispensing; net profit £500; illness sole cause of sale; price £1,200.

HOME COUNTY.—£3,500 returns; General, Retail, and Prescribing, with local Wholesale; owner retiring; this business is capable of considerable development; net profit averages £550 for last 3 years; at valuation of stock and fixtures, about £1,200.

MIDLANDS.—General, Retail, with some local Wholesale; returns £1,100; price about £700.

WORCESTER.—Returns £350; profitable Retail and Prescribing; price about £300.

SHEFFIELD.—Branch Retail; returns about £400; price £125; chance for young men of limited means.

SURREY.—Pretty district; Unopposed Retail, Dispensing and Prescribing; full prices; returns £250; good stock and fixtures; about £250.

Mr. Brett has buyers of good-class Businesses, returning £1,000 to £2,000. Vendors can at once be supplied with cash buyers.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

CHEMIST AND DRUGGIST'S BUSINESS, handsomely fitted, in densely populated locality; through exceptional circumstances will be transferred for price of fixtures. Apply, 6 Loudon Road, Southwark. A personal interview solicited.

£60.—A small genuine Retail.—Giving up business; will be sold on above favorable terms; receipts under indifferent attention between £4 and £5 weekly, can be much increased by a steady, business-like man. H., care of Mr. Lysaght, 1 Newbold Street, Commercial Road, East.

TO CHEMISTS.—For Sale, in Ireland, an old-established Business (about 60 years); large population; slight opposition; exceptional opening for pushing business man; owner retiring on competence; every facility given for inquiry. 103, 51, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A LIGHT Retail, in the suburbs of a military town; turnover £500; population over 70,000; has been carried on successfully under a manager for upwards of 9 years; is capable of considerable improvement in the hands of an energetic man. Address, A. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

£300.—Western County, well situated in an increasing market town; returns about £500, good profits; large shop, nicely fitted and well stocked; convenient house, well-stocked garden; price £300 or offer; capable of extension. H. B., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WORCESTERSHIRE.—Advertiser wishes to sell his Light Retail Business, in town of 6,000 inhabitants; returning £850; net profit nearly £400 after deducting all expenses; good house and garden; cash price £500; will give month's introduction. Genuine applications only to "Kino," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

OLD-ESTABLISHED Business for sale in one of the principal thoroughfares of Newcastle-on-Tyne; proprietor retiring on account of ill health; the business includes an old Dental connection, which could be worked up without difficulty. Full particulars on application to John Ismay & Sons, Wholesale Druggists, Newcastle-on-Tyne.

BOOTLE.—For immediate disposal, owing to the proprietor wishing to retire, an old-established Dispensing, Prescribing, and Family Business; at present it returns £450 per annum, but this could be much increased; rent £45 per annum; lease still 20 years to run; price £400. Apply to A. H. B., care of Evans, Sons & Co., Hanover Street, Liverpool.

LANCASHIRE.—Healthy country district near the coast; a small genuine Business, select Retail and Dispensing; established 4 years; returns nearly £400, and increasing; good profits; well-fitted shop; good and large house, with garden, &c., on lease; small premium and valuation of stock and fixtures accepted. Address, D. C., Messrs. Evans, Sons & Co., Liverpool.

£6,000.—London.—Wholesale Business, very old established; held by vendor many years; returns about £6,000 yearly; capable of being much increased; the stock and fixtures may be taken at valuation (no premium required); vendor will give good introduction, as may be arranged. Apply to Messrs. Orridge & Co.'s Offices, 32 Ludgate Hill, London, E.C.

FOR immediate disposal, in a village-town of 2,200 inhabitants, within 3 hours by rail of London, an unopposed Light Retail, Dispensing, and Prescribing Business; an attractive shop, with large plate-glass window, and shop partly mahogany fitted; been under management since first opened, 10 months since; capable of considerable increase; nearest town 4 miles; thorough investigation; price £160. "Epsilon," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

YORKS, W.R.—£200 cash, principally light Retail, Dispensing and Prescribing; good opening for beginner; satisfactory reasons for leaving. "Lux," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

ENERGY REWARDED.—To a small capitalist.—A closed Chemist's Business; stock and fixtures at own price; rent £35; Park Road, Crouch End, Hornsey; fine future to pushing man. Apply, Beall, 9 Avenue, Barnet.

N.W.—FOR immediate disposal; good-class Dispensing and Light Retail Business with Gilbey's agency attached; in present hands about 15 years; particulars and satisfactory reasons for disposing, to bond-fide intending purchasers; no agents. Address, B. Y., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A FAMILY and Dispensing Business in a cathedral city in the North of England, and a railway centre; the average turnover for the last 3 years nearly £1,000 per annum; rent £70; satisfactory reasons for disposal can be given; price £900. For further particulars, apply to B. S. F., care of Evans, Sons & Co., Hanover Street, Liverpool.

IMMEDIATELY.—Branch Business in watering-place, West of England; best position good business town; handsome shop, well stocked; satisfactory reason for disposal: about £250 required, or a gentleman with smaller capital could have Partnership and Management. 147, 22, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED TO PURCHASE.—Messrs. Berdoo & Co. have a large number of buyers still unsuited, waiting to purchase genuine Businesses in town and country; returns from £50 to £2,000; gentlemen wishing to sell should communicate with us in strict confidence; terms on application. Transfer Offices, 30 Jewry Street, Aldgate, City. (Established 1870.)

APPRENTICESHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED to Apprentice a Youth, who has passed Preliminary examination, in a good Family and Dispensing business; country town preferred. Apply, stating terms, to E. Creswell, M.R.C.V.S., Bromsgrove.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED immediately, Junior Assistant, about 20 (outdoors). State age, height, and reference, photo, Robert Cook, Pharmaceutical Chemist, Grimsby.

MR. PASSMORE, 89 Union Road, Newington Causeway, S.E., requires a Junior; good address; able to extract teeth. An interview preferred.

JUNIOR, by August 16, for Light Retail and Dispensing Business; permanency; Ohurchman. State full particulars to A. Cartwright, Chemist, Henley-on-Thames.

J. W. LASHAM, Pharmaceutical Chemist, Romford, has vacancy for gentlemanly Junior at once; this offers a good berth for Minor students; enclose photo with application.

WANTED, immediately, an Assistant, accustomed to good Country Retail, Dispensing, and Agricultural trade; good salesman. Apply to Frupp & Co., late Grindley, Chester.

WANTED, Agent in London to represent wholesale perfumery house; must have good connection. "Perfume," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

FOR JAPAN.—Qualified English Assistant; about 25; first-class London experience and references indispensable. Apply by letter to Dakin Bros., Creechurth Lane, Leadenhall Street, London, E.C.

F. R. BESSANT, Westgate-on-Sea, requires a thoroughly trustworthy qualified Assistant, of good address; must be a quick and reliable Dispenser. In applying, state height and enclose carte.

A QUALIFIED Assistant; aged about 23 years; one who has been accustomed to a good-class Country Business; liberal salary given. Apply, stating references, &c., to Allen & Neale, King's Lynn.

WANTED, an Assistant, at once, for season, outdoors, accustomed to a high-class business; must have good address and experience. Apply, with carte, to the South-Eastern Drug Company, Folkestone.

IMMEDIATELY, a competent Assistant for a busy Retail; good salary to suitable man, in or out doors. J. H. Smith, 227 Commercial Road E.

WANTED, a temporary Assistant (outdoors); a little knowledge of French required. Apply, by letters only, "Augustus," 15 Wardour Street, London.

IMMEDIATELY; a Junior for good-class Country business (indoors); not under 20. Apply, with full particulars, to H. Wilkies, 357 High Street, Cheltenham.

IMMEDIATELY, Junior for high-class trade. Apply, sending references and carte, and stating salary required, to E. J. Bishop, Sandgate Road, Folkestone.

JUNIOR Assistant, by end of August, for large business (outdoors); short hours; no Sunday duty. Apply, with references, to W. D. Gibb, Chemist, 31 High Street, Winchester.

WANTED, Junior Assistant (outdoors) as assistant in a mixed business; must be good Prescriber and Tooth Extractor; state salary, age, and references. Stacey, Manchester Street, Oldham.

WANTED, thoroughly experienced Assistant; must be good Counter-man and Dispenser; liberal salary given. Photo and references to William Oldershaw, Chemist, Long Row, Nottingham.

IMMEDIATELY.—Wanted, a Manager to take charge of a Wholesale Drug and Drysaltery business; one who thoroughly understands oils, paints, varnishes, &c. Apply, B. B. Cowgill, Sowerby Bridge, Yorkshire.

WANTED, a Qualified Assistant, about 24 years of age, to Manage a Branch Shop. Apply, personally, if possible, to W. Rumball, 2 Surrey Square, S.E., before 11 in the morning or after 7 in the evening.

WANTED, a young man as Improver, of strict religious principles (Dissenter preferred); time for study allowed; good references required. Address, stating salary required, to Greensill, Fishponds, Bristol.

WANTED, early in September, a competent Assistant; must have unexceptionable references; accustomed to a country trade, and understand Welsh. Apply, stating particulars, to J. Harrison Jones, Denbigh.

JUNIOR ASSISTANT for Retail Counter; outdoors; must be an active Counterman, of good appearance and address. Apply, stating age, height, salary required, and enclose photo, S. Wand, Chemist, Leicester.

SOUTH COAST.—Beginning of August, Assistant, not under 22 years, of gentlemanly address and good character. Apply, with full particulars, to A. B. Cortis, Pharmaceutical Chemist, 30 South Street, Worthing. Indoors.

WANTED, a Junior, accustomed to a good Retail and Dispensing business; one used to a mixed country trade preferred. Apply, stating age, height, salary required, with photo if possible, and references, to W. M. Turner, St. Ives, Hunts.

WANTED, a man with a knowledge of Chemistry to manage a works making Dry Soap, and to travel occasionally; a good position for a man of energy. Apply, stating previous experience, to the Secretary, Crystalline Dry Soap Co. (Limited), Sandbach, Cheshire.

WANTED, at once, a thoroughly reliable Assistant, about 25, for mixed Retail and Country Wholesale trade; indoors. Apply, stating previous engagements, salary required, &c., Sykes, Chemist, Moldgreen, Huddersfield. A vacancy also for an Apprentice.

WANTED, Assistant (outdoors), aged about 22, accustomed to good country Retail, Dispensing, and Agricultural business, obliging and trustworthy; moderate hours; no Sunday duty. Apply, stating age, height, salary, references, and carte (returned), to W. Boor, Wisbech.

WANTED, an energetic Assistant, qualified; must be a quick Counterman, and obliging; one with a view to Partnership preferred, but not necessary. State age, height, references, salary required (outdoors), and enclose carte (to be returned), Drug Co., 10 Tontine Square, Hanley.

JESSE WILLIAMS & CO., Pharmaceutical Chemists, Cardiff, require the services of an Assistant for the Retail counter; preference will be given to one who has some knowledge of Photographic goods; please state age, height, salary required (outdoors), and when disengaged.

WANTED, a young man with good practical knowledge of Drug trade; need not be qualified, but sober and obliging; give full particulars as to age, experience, and reference; start duty about middle of September. Apply, "Ireland," care of Messrs. Newbery & Sons, 3 King Edward Street, London, E.C.

PARIS.—Immediately, an active and experienced Counterman (seeking a permanency and speaking French fluently) for a high-class Retail establishment; must be tall and of good address; liberal salary. Apply by letter, with photo (to be returned), to A. B. O., care of Messrs. Maw & Son, Aldersgate Street, London.

ASSISTANT, not under 25 years of age (single, indoors), in a Light Retail business; accustomed to Prescribe, Dispense, &c.; good references required. Apply, J. E. Harris, 60 Exmouth Street, Clerkenwell, W.C.

WANTED, competent Assistant, in good-class Business, for three or four weeks during holidays; must give satisfactory references. State age, salary required, and usual particulars to Thomas Fox, Great Malvern.

WANTED, Qualified Assistant as Branch Manager, for good-class business, married, and seeking a permanency. Apply, with full particulars, Deacon & Howlett, Chemists, Beckenham. Applications not answered after 3 days, declined.

ASSISTANT, to manage Branch; qualified; good Prescriber, and able to extract teeth preferred; single; send carte, when disengaged, state salary required. "Auranti," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, immediately, Junior Assistant; also an Improver; one used to a Country business. Write, stating full particulars, experience, references, and salary required, to H. S. Martin, Chemist and Mineral Water Manufacturer, High Street, East Grinstead, Sussex.

WANTED at once, a Junior, qualified, or good Improver (indoors), for Light Agricultural Retail; comfortable permanency; two evenings off weekly; state particulars, age, reference, and salary required, also photo (to be returned). J. B. Humble, Chemist, Abergavenny.

WANTED, at once, an Assistant to take charge of small Mixed Country Branch (outdoors); time for study; no Sunday duty; able to prescribe and extract. Apply, with age, salary, testimonials, to James Watkinson, Chemist, 54 Bolton Road, Walkden, near Bolton.

IMMEDIATELY.—A permanent qualified Manager, for Yorkshire; must be a good Prescriber and Tooth extractor; a total abstainer preferred; send photo and particulars, including age, height, reference, and salary required (outdoors), to "Dentist," care of Messrs. Evans, Sons & Co., Hanover Street, Liverpool.

WANTED an Improver or Apprentice in a Family and Agricultural business; must be willing to deliver parcels, &c., and make himself generally useful; short hours; no Sunday duty; small salary given to one with a knowledge of the business; character required. T. E. B. Blankley, Dispensing Chemist, Market Place, Brigg, Lincolnshire.

IN two or three weeks, a qualified Assistant; £90 (outdoors); must be thoroughly obliging and trustworthy; hours 8 to 8.5, Saturday 10 o'clock; nice class of Country business; Apothecaries' Hall entertained, £84 (outdoors); a conscientious energetic man would be treated liberally and with consideration. "Epsilon," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

CHEMIST, Manufacturing.—A Wholesale House requires the services of a young Chemist who has a thorough practical experience in the manufacture of Chemists' preparations, including Perfumes, Violet Powder, Fulcers' Earth, Magnesia, &c.; a liberal progressive salary will be offered to a man of ability and energy. Apply by letter, giving details of experience and qualifications, to S. M. S., care of Deacon's Advertising Offices, Leadenhall Street, E.C.

SITUATIONS WANTED.

1s. for twelve words: 6d. for every six words beyond.

TEMPORARY; day, week, &c. "Radix," 115 Brasbury Road, N.

ASSISTANT; 24; 8 years' experience; disengaged August 12. Miles, 192 Uxbridge Road, W.

WHOLESALE; wet counter; 13 years' experience; aged 29. W., 166 Walmgate, York.

AS Traveller, either town or country. "Edina," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LOCUM-TENENS; good Prescriber, Tooth Extractor; qualified; aged 40. H., 296 Brixton Road, S.W.

ASSISTANT; outdoors; Minor qualification; aged 30. "Chemicus," 14 Gerrard Street, Aston, Birmingham.

AS Branch Manager or Assistant; three years in last situation; good references. W. H., 9 Leazes Place, Durham.

TO Manage a Branch; can extract teeth, &c.; qualified; married; good prescriber. "Chemicus," 76 Wellington Street, Batley, Yorks.

AS Analytical Chemist with Wholesale or Manufacturing firm; over 15 years' experience; good qualifications. "Fidus," 4 Lynton Road, Crouch End, Hornsey, London, N.

ASSISTANT or Manager; 28; thoroughly competent all round; outdoor; London preferred; moderate salary; part or full time. "Chemicus," 11 Museum Street, W.C.

ASSISTANT or Temporary; aged 29; experienced; disengaged. E., 13 Sumner Road, Croydon.

WHOLESALE; town or country; permanency preferred. T. O., 36 Argyle Square, W.C.

TEMPORARY or permanent; aged 40; unqualified; disengaged. A. N., 33 Howland Street, W.C.

LOCUM-TENENS; experienced; disengaged about August 18. "Locum," 4 Dalston Lane, N.E.

JUNIOR; City, West end. Parisian experience; fluent French. "Volga," 17 Beckenham Road, Penge.

LOCUM TENENS; qualified; experienced; excellent references. "Chemist," 11 Beast Market, Nottingham.

AS Assistant or Branch Manager; aged 24; qualified; West End references. A. P. S., 5 Shelbourne Road, Holloway, N.

ASSISTANT in good Retail and Dispensing; aged 24; disengaged end of August. Hodgson, Boundary House, High Barnet.

NO Salary.—Part time situation wanted; with good Dispensing experience; (24). H. C., 139 Tufnell Park Road, London, N.

ASSISTANT in Manchester; permanent; 7 years' varied experience; aged 21. Duncanson, 12 Wellesley Terrace, Newcastle-on-Tyne.

ADVERTISER has had over 20 years' experience in Wholesale Drug houses, wishes for employment in London. Address, J., 50 Norfolk Terrace, Bayswater.

MANAGER or Senior; aged 50; qualified; active; steady; good references; outdoors preferred. N. M., Central Temperance Hotel, Long Lane, London.

MANAGER, light Retail and Dispensing; Major qualification; South of England. 331/77, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

AS Senior or Manager; good experience; Minor; permanency desired; please state hours and salary. Apply, "Maranta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IMPROVER or Junior; aged 21; three years in Analyst's laboratory as pupil and 18 months with a Druggist; London or home counties preferred. Smith, 5 Norrinn Road, St. Leonards.

WHOLESALE.—As Wet Counterman, or position of trust, in a good house; highest references; permanency. "Fortywarf," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AS Manager or Assistant, with a view to purchase in twelve months; full particulars, amount of cash, &c., at personal interview. G. G., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

MANAGER, branch or otherwise; suburbs of London preferred; 14 years' good experience; efficient Prescriber and Extractor; excellent references; Minor qualification. J., Medical Hall, Wimborne.

AS Junior (in or out doors); can be well recommended as thoroughly reliable, obliging, &c.; aged 23; height 5 feet 10 inches. Address, stating salary, hours, &c., C. W., Montpellier House, Budleigh Salterton, Devon.

MANAGER (Branch or otherwise); 12 years' experience; good all-round man; Minor and Apoth. Hall qualifications; silver medallist; aged 27; height 5 ft. 11 in.; excellent references; disengaged. "Nemo," Wileys & Co., Coventry.

WHOLESALE and Manufacturing Chemists.—A gentleman, for many years connected with the medical profession, is desirous of situation as Traveller for Drug House doing trade with surgeons; conversant with surgical instruments; unexceptional references. S., 252 St. Philip's Road, Sheffield.

BY a married Registered Chemist, of great experience, 22 years in business and 15 years as medical assistant, who, hard hit by cutting, has sold his business, an engagement as Manager, or other suitable occupation; has good supply of furniture, is active, and of gentlemanly appearance and address. "Medicus," 120 Choumert Road, Peckham.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading which can be obtained on application.

MESSRS. BLONDEAU ET CIE. beg to give notice to their customers that Mr. F. J. Harris is no longer representing them.

LONDON AGENCY OR TRAVELLER.—A Gentleman well acquainted with the Wholesale and Retail Druggists and Sundry Houses is open to an engagement as Agent and Traveller; first-class references can be given. Address, G. B., 172 Loughborough Road, London, S.W.

SPECIAL OFFER TO CHEMISTS.—On receipt of business card we will forward free one box containing a dozen "Captain Cook's Sea Baths"; a striking novelty; sells at eight; pronounced by leading authorities to be the best line of its kind ever introduced. Address, The Manager, 62 High Street, Weston-super-Mare.

TO REGISTERED DENTISTS in England, Ireland, Scotland, or Wales.—A gentleman, qualified, and a first-class operator, is willing to give demonstrations (privately at their own place of business) to those who wish to improve their knowledge of English and American modern Dentistry, the Administration of Nitrous Oxide Gas, Gold-stopping, use of the Elastic Mallet, and a new, easier and better system of Crown and Bridge work than any yet invented; fee moderate. Apply, "Demonstrator," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PRELIMINARY AND MINOR.

ALL Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclosed stamped envelope to Mr. J. Tully (Hall's Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

STUDENTS' AIDS TO EXAMINATION.

PRELIMINARY.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. Nixon.—Equations Simplified, 1s. Illegible Autographs Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

THERE ARE TWO BOOKS

Which all Chemists ought to have and to read as faithfully as their British Pharmacopoeia, viz.,

ALPHE'S

"**HANDY BOOK OF MEDICINE STAMP DUTY**"

(Price 2/6, by post 2/9), and

"**THE ART OF DISPENSING**"

(Price 3/6, by post 3/10).

Published at the Offices of "The Chemist and Druggist,"
LONDON AND MELBOURNE.

May be obtained from most Wholesale Houses, who invoice the Books at the published prices.

OUR WEEKLY SUPPLEMENT.

We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, exchange column &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

OFFICES: 42 CANNON STREET, LONDON, E.C.

Established
1852.**"OPTIMUS"**CATALOGUE
and DISCOUNTS OF
APPLICATION.**"OPTIMUS" MAGAZINE CAMERA**Pictures $4\frac{1}{2}$ by $3\frac{1}{2}$ inches.Carries
12
Dry Plates,
no
Dark Slides.
Plates changed
by turning a
button.The most
convenient yet
invented.
Price, with
Rectilinear Lens
and
Shutter,
£6 6s.**"OPTIMUS" PHOTOGRAPHIC SETS**

With Tripod and every necessary complete.

For Plates

 $4\frac{1}{2}$ by $3\frac{1}{2}$ **£3 8s.**

For Plates

 $6\frac{1}{2}$ by $4\frac{3}{4}$ **£5 15s.**For Plates $8\frac{1}{2}$ by $6\frac{1}{2}$, **£9 10s.**THIRD EDITION.
READ BEGINNER'S GUIDE TO
PHOTOGRAPHY. 6d.**"Optimus" Euryscope**

"Working as it does with such a large aperture (f/6 approx.), it serves as a portrait and group lens, as well as a landscape and copying objective. There is no doubt of its proving a most useful lens."—J. TRAILL TAYLOR, "British Journal of Photography."

"We are pleased to find upon trial that the Lens ("Optimus" Rapid Rectilinear) sent for review is really an EXCELLENT INSTRUMENT." — "Photographic News."



"I should strongly recommend Rayment's Camera. It is LIGHT, COMPACT, very RIGID, and extends to about double the usual focus." — "Amateur Photographer."

"Optimus" Rapid Euryscope.

5 by 4, 63/-; 7 by 5, 94/6; 9 by 7, 126/-; 10 by 8, 220/-

"Optimus" Rapid Rectilinear.

$\frac{5}{4}$	$\frac{6}{5}$	$\frac{7}{5}$	$\frac{8}{5}$	$\frac{9}{7}$	$\frac{10}{8}$	$\frac{12}{10}$	$\frac{15}{12}$	$\frac{18}{16}$
33/-	45/-	49/6	64/-	82/6	127/6	142/6	180/-	225/-

"Optimus" Wide-Angle Symmetrical.

$\frac{5}{4}$	$\frac{7}{5}$	$\frac{9}{7}$	$\frac{10}{8}$	$\frac{12}{10}$	$\frac{15}{12}$	$\frac{18}{16}$
39/-	52/6	82/6	127/6	142/6	180/-	225/-

"Optimus" Quick-Acting Portrait.

Diameter	..	2 inches.	2 $\frac{1}{2}$ inches.	3 $\frac{1}{2}$ inches.
Price	..	90/- (1 B)	120/- (2 B)	180 (3)

Rayment's Patent Camera (Long Focus).

Price includes 3 Double Dark Slides.

 $4\frac{1}{2}$ by $3\frac{1}{2}$, 120/-; 5 by 4, 126/-; $6\frac{1}{2}$ by $4\frac{3}{4}$, 145/-; $8\frac{1}{2}$ by $6\frac{1}{2}$, 168/-; 10 by 8, 212/-; 12 by 10, 258/-; 15 by 12, 314/-**"Optimus" Camera (Long Focus).**

Price includes 3 Double Dark Slides.

 $4\frac{1}{2}$ by $3\frac{1}{2}$, 130/-; 5 by 4, 133/-; $6\frac{1}{2}$ by $4\frac{3}{4}$, 137/-; $8\frac{1}{2}$ by $6\frac{1}{2}$, 175/-; 10 by 8, 227/-; 12 by 10, 275/-; 15 by 12, 333/-**Wide-Angle Camera (Long Focus).**

Price includes 3 Double Dark Slides.

 $4\frac{1}{2}$ by $3\frac{1}{2}$, 140/-; 5 by 4, 146/-; $6\frac{1}{2}$ by $4\frac{3}{4}$, 165/-; $8\frac{1}{2}$ by $6\frac{1}{2}$, 188/-; 10 by 8, 235/-; 12 by 10, 288/-; 15 by 12, 350/-

6d. "The Magic Lantern: its Construction and Use." READ

PERKEN, SON & RAYMENT,99 HATTON GARDEN, "OPTIMUS."
LONDON.**ANOTHER**

The fame of the "Demon" No. 1 has spread throughout the world, and no invention has ever been produced that has secured such an enormous sale in such a short time.

Within the last 15 months UPWARDS OF A QUARTER OF A MILLION (250,000) have been sold, and the demand increases daily as the holiday season approaches.

THE "DEMON" CAMERAS

WE ARE HERE AGAIN

DEMON N°1 POST FREE 5/6

DEMON N°2 INCLUDING PLATES POST FREE 13/3

CHEMICALS AND INSTRUCTIONS

THE WONDERS OF THE WORLD

80,000 TESTIMONIALS FROM DELIGHTED PURCHASERS

IF IN DOUBT WRITE FOR SPECIMEN PICTURES AND BE CONVINCED

N°1 SPECIMEN 2° EACH N°2 DO 4° EACH

INCLUDING ILLUSTRATED LIST & ALL PARTICULARS

NO KNOWLEDGE REQUIRED

YOU TOUCH THE TRIGGER, AND THE PICTURE IS TAKEN.

"DEMON"

Upwards of 300 Chemists are selling our goods all the year round—Photographic goods in Summer; Scientific Novelties in Winter.

Lists and Trade Terms Free.

WHY IS THE "DEMON" SO POPULAR?

1st.—The "Demon" costs but a few shillings, and is simplicity itself. Other Detective Cameras cost as many pounds, but they are generally so complicated, that amateurs invariably fail to succeed with them.

2nd.—The "Demon" will produce every kind of picture—views, groups of figures, statuary, moving objects, &c., and the lenses are always in focus: in fact, the "Demon" will take a view a mile away, or you can hold it in your hand at arm's length, and it will take your own photograph (large head and shoulders) by simply touching the trigger.

3rd.—The "Demon" is the only really secret Camera that cannot be detected in use.

4th.—The "Demon" is the only Camera that requires no previous knowledge of photography; you touch the trigger and the picture is taken.

5th.—The "Demon" is the only Ladies' Camera, because it weighs under 3 ounces, and it is as beautiful as a piece of jewellery, being made entirely of polished Nickel Silver.

6th.—The "Demon" being made entirely of metal is suitable for any climate, and cannot get out of order. Each part is also machine made and interchangeable, and can be duplicated by return post if accidentally damaged.

7th.—The "Demon" will take hundreds of pictures in rapid succession, and these can be placed aside until the holiday or journey is finished, when it is a fresh enjoyment to print off reminiscences of past pleasures.

8th.—The first "Demon" Camera cost us upwards of £250 for tools alone, and as each Camera has to pass through forty-three machine presses before it is completed, several thousands of pounds of machinery are required to produce a single Camera, but we are now enabled to turn out a thousand a day.

9th.—If you start upon your holiday without a "Demon," you will regret it from start to finish. The old churches, the beautiful scenery, the comic incidents, the friends and companions all will be missed; you will see others snapping pictures during their travels from every available spot, like bees gathering honey, but you, alas! will only serve as a principal figure in a group of disconsolates who started for a holiday without a "Demon."

10th.—If you are still dubious in the face of 70,000 unsolicited testimonials from those who have purchased, make yourself doubly secure by writing for specimen pictures taken with the "Demon," and see what others can do who know nothing about photography until they made a friend and companion of the "Demon."

THE AMERICAN CAMERA CO., 93 OXFORD ST.; ALSO 397, 399 EDGWARE ROAD, LONDON, W.

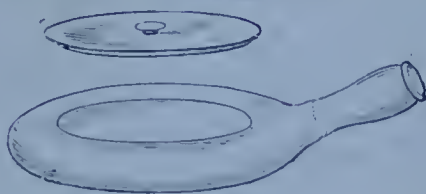
CAUTION.—Address all Orders to Manager, "C. D." Department, latter address.

H. GILBERTSON & SONS.

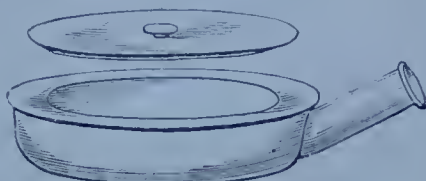
Proprietors—R. D. DIXON, JOHN DOWELL, A. B. V. TAFES.

DRUGGISTS' SUNDRIESMEN.

REDUCTION IN PRICES OF EARTHENWARE BED PANS AND URINALS.



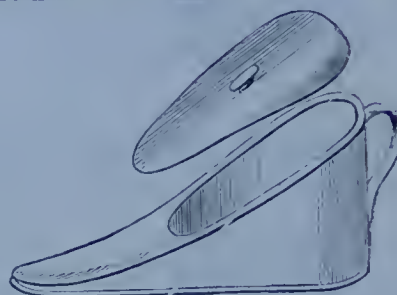
BED PANS (Round) as Fig. 1, Small, Medium, and Large, 2/3, 3/4, 3/6 each.
 " " with covers 3/6, 3/9, 4/3 "



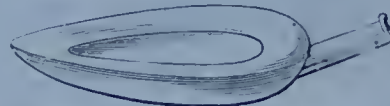
BED PANS (New and Improved) as Fig. 3	..	..	2/9, 3/3, 3/9 each.
" " " with covers	..	..	3/6, 4/-, 4/6 " 1/2



URINALS (Male) as Fig. 5 1/4 each.



BED PANS (Slipper) as Fig. 2	..	..	..	..	3/-	3/6, 4/-	each.
" " with covers..	..	..	..	..	3/9, 4/6, 5/-	"	



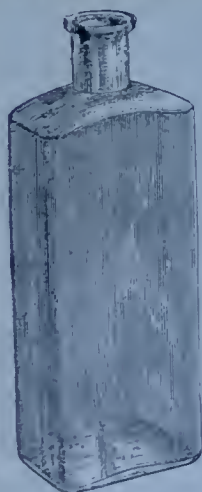
URINALS (Spoonbill) as Fig. 4 1/4 each.



URINALS, Female, as Fig. 6 1/4 each

GILBERTSON'S REGISTERED DISPENSING BOTTLE.

Rd. No. 118583.



PRICES.

1	1½	2	3	4	6	8	10	12	16	20 oz.
10/0	10/0	10/0	11/6	11/6	12/9	12/9	20/6	20/6	23/6	30/0 Green, per grs.
10/9	10/9	11/6	12/6	13/0	15/6	15/6	24/0	24/0	27/0	34/6 White, „

IN CRATES (about 6 Gross Assorted).

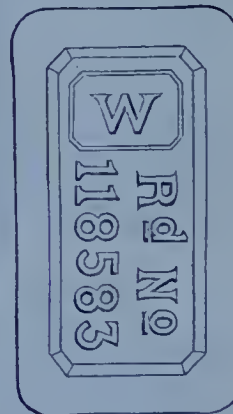
Not less than 1 gross of a size.

1	1½	2	3	4	6	8	10	12	18	20 oz.	
9/6	9/6	9/6	10/9	10/9	11/9	11/9	19/0	19/0	21/6	27/0	Green, per grs.
10/3	10/3	11/0	12/0	12/6	14/9	14/9	23/0	23/0	26/0	33/6	White, "

CRATES AND CARRIAGE FREE.

Casks for EXPORT are charged, but delivered F.O.B.

NAME PLATES EXTRA, AT USUAL RATES.



FACSIMILE OF
BOTTOM OF BOTTLE.

This Bottle is made with rounded corners without altering its flat surfaces, which not only adds to its appearance but reduces breakage to a minimum, *ensuring accurate capacity, simplifying labelling*, and producing a perfect appearance when wrapped.

ANY OF THE ABOVE BOTTLES ARE SUPPLIED WITH FLAT, GLOBE, OR CUT GLOBE STOPPERS.

ALSO MADE IN ACTINIC GREEN AND AMBER, SUITABLE FOR SPECIALITIES.

SPECIAL QUOTATIONS TO SHIPPERS AND THE WHOLESALE TRADE.

11 ST. ANDREW'S STREET, HOLBORN CIRCUS, LONDON.

EVIL EFFECTS OF SOAP.

SOAPS dry, roughen, and weaken the Skin, and make it blotchy, dull, and muddy, the Hair wiry, white, and weak, and the Nails striated and brittle, from the following causes :—

- 1.—Soda or Potash left in them.
- 2.—Deleterious Scents and Colours.
- 3.—Rosin, Methylated Spirits, and Sugar (as in transparent soaps).
- 4.—Jetsam and Flotsam (rotten materials).
- 5.—Cocoanut Oil (makes alkaline soaps “bite”).
- 6.—Glycerine, which is drying.

NOTE (A)—VINOLIA SOAP contains extra fatty matter, instead of soda and potash, and is guaranteed pure.

The Chemist and Druggist reports—“‘VINOLIA’ SOAP is an ideal Soap, is delightfully perfumed, and the skin has a velvety feeling after washing with it.”

(B)—VINOLIA SOAP is not coloured, polished, whitened, made transparent with chemicals, or in any way “doctored up.”

The Illustrated Medical News—“The great feature of ‘VINOLIA’ SOAP is that it contains, instead of some free alkali, an excess of the unsaponified cream, consequently it is beautifully emollient and softening to the skin.”

(C)—VINOLIA SOAP yields a creamy, soothing lather, which cleanses without shrivelling the skin, hair, or nails.

The Lancet—“No free alkali, a distinct excess of free fat, odour delicate; an article of excellent quality.”

(D)—VINOLIA SOAP is out of the category of all other soaps, and is not to be confounded with them.

The Hospital—“Particularly suited to the nursery.”

(E)—VINOLIA SOAP is the only soap for skin affections, delicate skins, shaving or shampooing, and the toilet, nursery, and bath.

Health—“The acme of all that has been done in soaps.”

OF ALL CHEMISTS:—*Vinolla Soap, Floral, 6d., Balsamic (Medical), 8d., Otto of Roses (Toilet), 10d. per Tablet. Vinolia and V. Powder, 1s. 9d., 3s. 6d., and 6s. V. Shaving Soap, 1s., 1s. 6d., and 2s. 6d. per Stick, and Flat Cakes in Porcelain-lined Metal Boxes, 2s.*

BLONDEAU et CIE., Ryland Road, LONDON, N.W.

EXCHANGE COLUMN.

This Section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week. Remittances payable to EDWARD HALSE.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

FOR DISPOSAL.

Educational.

Southall's chemical specimens, quite new, cost 25s., price 15s. Bates, 5 Grand Parade, St. Leonards-on-Sea.

Good condition, post free, "Latin Pharmacopœia," interleaved, 1824, 3s.; Cooper's "Surgical Dictionary," 1830, re-bound, 2s. James Brown, Amptill.

Formulas.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Brooks's Recipes.—Depurative saline, perfectly soluble, 10d. lb.; "Sweet Memories," new invigorating bouquet; oatmeal and white rose lotion, specialty for seaside, cooling and purifying; tic specific, magic cure, instant action, very reliable; recipes, with instructions, post free 7d. each, 3 for 1s. 6d.; list of 400 free. Tom Brooks, Chemist, Horsey, N.

Something new.—Sweet solid perfumes.—Enchanting, delicious odours, everlasting, entirely unique, easily made, "Floral Bouquet," "Moss Roses," "Heliotrope and Musk," "Old English Lavender," "Carbolyptol," for preventing contagion; "Camphorescence," destroys moths, fleas, &c.; these retail 2d. The six recipes, with full instructions, and two samples of each, post free, 5s. Tom Brooks, Chemist, Hornsey, N.

Drugs and Chemicals.

Surplus drugs.—4 lbs. iodoform, 14s. lb.; 30 lbs. gum, good sorts, 9d. lb.; 4 lbs. pulv. ipecac., 7s. lb.; 14 lbs. gum gamboge, 2s. lb. Cook, Chemist, Middlesborough.

Shop Fittings.

Drawers.—12 feet long, solid mahogany fronts, with bevelled-edged glass labels and cut-glass knobs, shelving and cornice over, with backs, stained lockers under drawers, all complete and in splendid condition, 15l. 10s. the lot. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Carboys, pink ointment-jars, dispensing scales, and a large quantity of fittings of every kind suitable for a chemist, very cheap. Philip Josephs, 54 Old Street, Goswell Road, London.

A large quantity of chemists' fittings and utensils for sale, very cheap, or exchange. Wall-cases, counters, counter-cases, sponge-cases, desk and cases, dispensing-counters, dispensing-screens, drawers, lockers, shelving, coracles, upright cases for wall and counter, drawers for under counter; a number of silvered glasses in frames, several with 1-inch bevelled edges; specimen-jars, ointment-jars, bottles, pill-machines, scales, carboys, outside lamps (globe and square), deatists' outside cases, mortars. Send requirements, and particulars of nearest, with drawing, will be forwarded. Also a grocer's fixture, with canisters, butter-block, scales, dummy cheese, &c., &c. Elkanah Natali, 207 Old Street, London (almost opposite Great Eastern Street).

Fixtures and fittings of a chemist's shop. Apply, 54 Canonbury Road, Islington, N., before 11 A.M., or 7 P.M.

Two nests drawers, mahogany fronts; two counters, and window-casing. Standing, Darwen.

Counter-case, bent plate-glass, 6 feet long, as Maw's A 18, good as new, price 5l. 10s. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Miscellaneous.

Five ordinary double trusses, slightly soiled, for 6s. Willis, Chemist, Stockport.

Gibson's life elixir, half retail; 5/100 Havana cigars, 21s., cost 31s. 6d.; 5/100 foreign, 13s. 6d., cost 21s.; 6/50 choice cigars, 4s., cost 5s. 9d. Slater, Beeston Hill, Leeds.

Job lots of mineral-water and other bottles; 100 gross split lemons; 50 gross 10-oz. square dark coffee extracts; 30 gross cherry brandy quarts; what offers to clear? 85/61.

New hokey, beautiful golden colour, 6d. lb.; beeswax, 1s. 3d. lb.; Dalmatian insect-powder, 1s. 2d. lb.; arrowroot, 4d. lb.; petroleum jelly, 4½d. lb.; ground ginger, 4d. lb.; sample 3 stamps. Johanson, Chemist, Godalming.

Two 120 gallon oil-tanks, brass taps, 20s. each; 2 about 60 gallons, 15s. each, guaranteed sound, painted and good clean condition, on rail here; a large number partially soiled patents; list sent on promise of it being returned; prices low. Kemp, Horncastle.

GENERAL MANUFACTURERS OF ALL KINDS OF PHARMACEUTICAL PRODUCTS.

Pills, Sweet, Granules, Lozenges, Tablets, Pharmaceutical Confectionery, Impalpable Powders, Medicinal Biscuits, Alkaline Acid or Neutral Tar Liqueur; Soft, Dry, or Fluid Extracts evaporated in Vacuum, &c., &c.

EUG. FOURNIER, P. BON & CO., successors to **L. PINGEON,** PHARMACEUTICAL CHEMIST, **DIJON, FRANCE.**

Pearls, Capsules, and Capsulines by Pressure, containing all medicinal substances which can be capsuled, such as salts of quinine, various powders, ethers, etheroles, beech creosote, terpine, terpinol, turpentine essence, citrine santal essence, creosoted cod-liver oil, balsam of copahu, tar, &c., &c.

CAPSULES - PINGEON.

Boxes and Bottles specialised with the mark PINGEON, or with Buyer's Name. GOODS SOLD IN BULK.

Guaranteed to keep in all climates. Important discount to wholesale houses. Write for the general price list.

Soft Capsules and Capsulines containing essence of santal, balsam of copahu, and their compounds.

Russian Elastic Capsules with thin and flexible envelope containing cod-liver oil, castor oil, and other medicinal liquids which are taken in large doses.

"PUMILINE."

EXCLUSIVELY OBTAINED FROM



THE SNOW-GROWN PINE PUMIL.

"PUMILINE" ESSENCE

Is a specially prepared volatile essence, distilled from a particular variety of pine, growing nearest the snow level on the Alps. It possesses exceptional medicinal properties when given internally, or in the form of inhalations, in the treatment of Pulmonary and Diathetic Affections, such as Phthisis, Rheumatism, Gout, &c. It is a valuable deodorizer and disinfectant, and has a peculiarly refreshing and fragrant odour.

"PUMILINE" JUJUBES

For Sore Throat, Cough, Hoarseness, &c., they give immediate relief.

"PUMILINE" LINIMENT

Specially beneficial for use in Chronic Rheumatism, Gout, Lumbago, Sciatica, &c. It is also invaluable for Throat and Chest Affections, and may be taken internally, in doses of 2 to 5 drops.

"PUMILINE" PLASTER

Is most effective in Chronic and Muscular Rheumatism, Lumbago, Sciatica, and also for Chest Affections.

"PUMILINE" EXTRACT

For Gout, Rheumatism, and Skin Disease; used in BATHS, Ointments, and Liniments.

"PUMILINE" OINTMENT

For all Skin Affections, Irritations, Insect Bites Burns, &c. This Ointment is a fine smooth homogeneous application. It gives immediate relief in the intolerable itching of Eczema, &c. It is unrivalled both as a medicinal agent and toilet requisite.

"PUMILINE" SOAP

Is a carefully neutralised superfatted Soap, containing no free alkali, and is a Lubricant instead of a Desiccant to the skin. It is peculiarly adapted for use to the delicate skin of ladies and children. It leaves the skin smooth and satiny, and beautifies the complexion. The "Pumiline Essence" which it contains makes it a powerful disinfectant.

"PUMILINE" DRY INHALER

Most effective and convenient pocket inhaler for use in Throat or Lung Troubles. Is invaluable for use during a fog or mist.

G. & G. STERN have so arranged their Price List that a *very large margin of profit* is left to Chemists and to the Trade generally. In consideration of this, as well as the fact *that no other* Pine Preparations are in any way equal to "PUMILINE," Chemists will find it much to their advantage to stock the "Pumiline" Preparations.

PRICES—

	RETAIL	WHOLESALE.
"PUMILINE" ESSENCE.....	1/6 and 2/6 per bottle.....	15/ and 24/ per dozen.
"PUMILINE" EXTRACT	1/ per bottle.....	9/ per dozen.
"PUMILINE" JUJUBES.....	1/1½ and 2/3 per box	10/6 and 20/ per dozen
"PUMILINE" OINTMENT	1/1½ and 2/9 per pot.....	11/ and 27/ per dozen.
"PUMILINE" LINIMENT	1/1½ and 2/9 per bottle	11/ and 27/ per dozen
"PUMILINE" SOAP...(box of 3 cakes)	1/6 and 9d., and 1/ per tablet.....	15/, 7/6, and 9/ per dozen.
"PUMILINE" PLASTER	1/1½ each	9/ per dozen.
"PUMILINE" DRY INHALER.....	1/6 each.....	14/ per dozen.

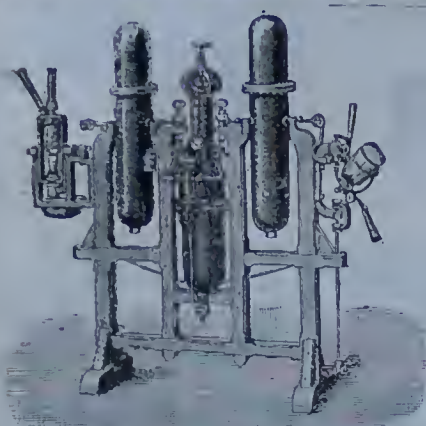
BESIDES WHICH AN ADDITIONAL DISCOUNT IS ALLOWED TO CHEMISTS AND THE TRADE.

G. & G. STERN, 62 Gray's Inn Road, LONDON, W.C.

Will send Show Cards and Literature Free on Application.

A. LOZÉ & CO., LD.,

**281 WEST DERBY ROAD
LIVERPOOL.**



INDISPENSABLE TO CHEMISTS.
THE ONLY PRACTICAL SODA WATER MACHINE.

Self-working by Chemical Action. No Skilled Labour.
NOT LIABLE TO GET OUT OF ORDER OR NEED REPAIRS.
Produces the Purest Aërated Water made.

Machines, in two sizes, at 25 guineas and 30 guineas. All complete. With the smaller a lad can make easily in ten hours twenty dozen Syphons or 100 dozen Bottles; with the larger, thirty dozen Syphons or 175 dozen bottles.

COUNTY LABORATORY, 30 BROWNLOW STREET, LIVERPOOL, October, 1889.

I have examined during the present year the Machines for making Aërated Waters invented by Mr. Lozé, and I have formed a very high opinion of them. No lead is found in any part which comes in contact with the water, and the process is one which produces absolutely pure Carbonic Gas. Accordingly I find that the effervescing water produced is free from every injurious metal or contamination, and has a better flavour than that produced in the ordinary way.
J. CAMPBELL BROWN, D.Sc.

CHEMICAL LABORATORY, 20 ALBERT GATE, MANCHESTER, 21st August, 1889.

GENTLEMEN,—At your request I have visited the works of Messrs. A. Lozé & Co., of Prescott Street and Tnebrook, Liverpool. I have inspected his patented Apparatus for producing Aërated Waters, and have analysed the Aërated drinks manufactured. The results of analysis quite justified the inferences which were drawn from a knowledge of the materials used. Thus, instead of using ordinary whiting (as the source of carbonic acid gas), which gives off small quantities of offensive gases when acted upon with acid, Mr. Lozé uses one of the pure soluble bicarbonates of either Potash or Soda; the use of this salt enables the apparatus to be much simplified in form, as no gas washer is required, but the carbonic acid gas may be led at once into the liquid in the Saturating Cylinders. The Aërated drinks produced are of very high quality, both as to purity and as to Aëration, and the apparatus possesses the merit of extreme simplicity and efficiency.—Faithfully yours,
C. ESTCOURT, F.I.C., F.I.

Messrs. A. Lozé, & Co., LIMITED.

DITTON, 10th April, 1890.

Dear Mr. Lozé,—I am pleased to inform you that I have been able to work the Machine sold to me by you without previous knowledge. With your patent Turnover I can bottle Patent Stoppers at the rate of two dozen per minute. Syphons and Corked Bottles I can fill much quicker than what you advertise the Machine to do.

The Aërated Waters produced have been sampled by a number of gentlemen, and pronounced by them to be of a most excellent quality.—Wishing you every success, I remain, yours truly,
ROBT. J. GOW, F.C.S.

THE ONLY PALATABLE NATURAL APERIENT WATER IS

“FRANZ JOSEF”

Write for pamphlet and particulars to the Sole Importers—THE “FRANZ JOSEPH” COMPANY, 101 Leadenhall Street.

THE TRIUMPH OF THE AGE

IS THE

**“NIAGARA”
BOTTLE,**

Or Improved CODD'S.

The most perfect Bottle in the market.

SEND FOR SAMPLE AND COMPARE!

PRICES ON APPLICATION.

Name on Bottles free for orders of 30 gross.
Under that quantity Moulds charged 10s.
for each size or shape.

Extra Rings, 1s. 6d. per Gross; printed with name of owner 3d. per Gross extra.



BUY THE

“LONDON-MADE”

SYPHON

(Title Registered)

AND SUPPORT BRITISH INDUSTRY.

It is the cheapest, strongest, handsomest,
and best in the World

Pure Black Tin Tops.

PRICE **1/6** EACH.

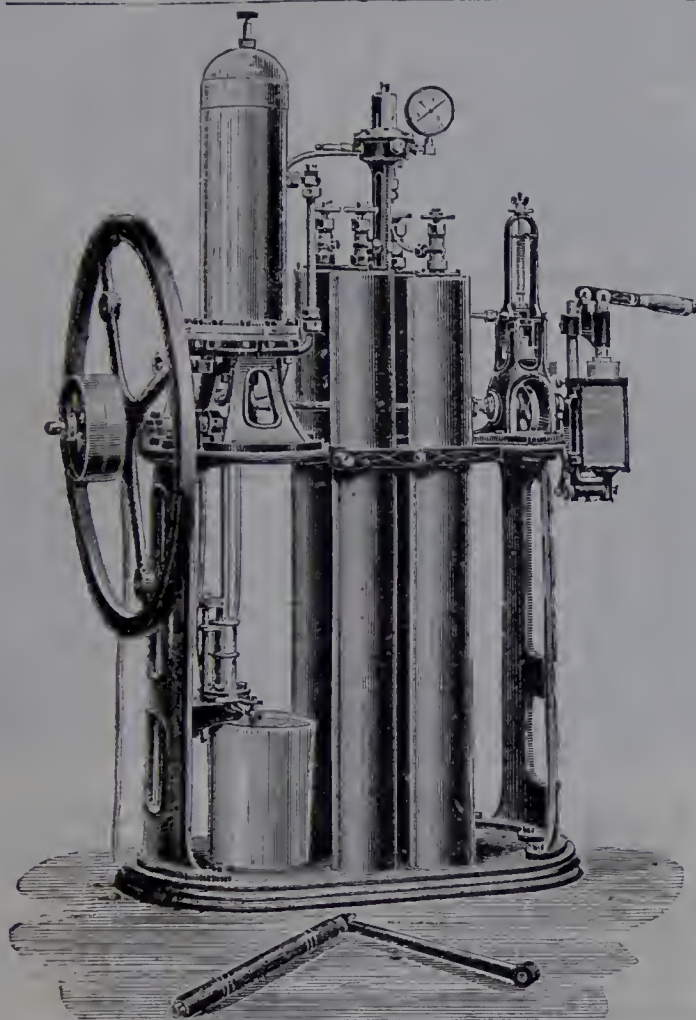
Nickel-plating Tops from 1½d. each.
Silver-plating Tops from 3½d. each.
Marking on Tops Free.
Marking on Vases Free for orders of 1,000.



ILLUSTRATED CATALOGUE FORWARDED FREE UPON APPLICATION TO
BARNETT & FOSTER, “NIAGARA WORKS,” 26T EAGLE WHARF ROAD, LONDON, N.

SODA-WATER MAKING

With Liquefied (So-called Natural) Carbonic Acid Gas.



The "Compact" Machines are designed where space is an object and for those having a large retail trade, such as Chemists, &c., for filling Bottles or Syphons, and are fitted on the one end with either the "Reliance" Syphon Filler or the "Excelsior" Machine for filling Patent Bottles.

No. 1 Size "Compact" Soda-water Machine complete, as shown, comprises a Niagara Cylinder, mounted, complete with all fittings, Reducing Valve, and a Bottling Machine for Syphon Bottles or for Patent Bottles, the latter fitted with Syrup Pump, the whole mounted on a massive cast-iron frame, fitted with shaft, flywheel, with fast and loose pulleys, for steam or other power, and also handle for hand-power.

By opening one of the iron vessels, and setting the Reducing Valve to the required pressure, a stream of gas is let into the Cylinder; pumping the water into the Cylinder by means of the flywheel may then be commenced, and as soon as it shows in the Water Gauge, bottling may be started, and continued while the water pump is being worked. About 50 dozen bottles per hour can be bottled with ease by hand-power.

Price complete, **£55.**

No. 2 Size ditto ditto, with a producing capacity of 25 dozen bottles per hour—

Price complete, **£30.**

LIQUEFIED CARBONIC ACID GAS, in iron vessels containing 28 lbs., which is sufficient to aerate 20 gross of waters, or 3,000 to 4,000 draughts from the Pillar Fountain, as shown below, **10/-** each.

Specimens of Testimonials we are receiving from users of the "Compact" Machine.

From A. THOMPSON, Esq., M.P.S.,
The Putney Drug Stores, 98 High St., Putney, S.W.

"I am more than satisfied with the No. 1 'Compact' Machine which answers my utmost requirements. I find with the aid of a youth I can fill six dozen syphons per hour, including syruing. I have nearly trebled my sale this last three weeks."

From E. H. TAYLOR, Esq.,
Middle Ahhey Street, Dublin.

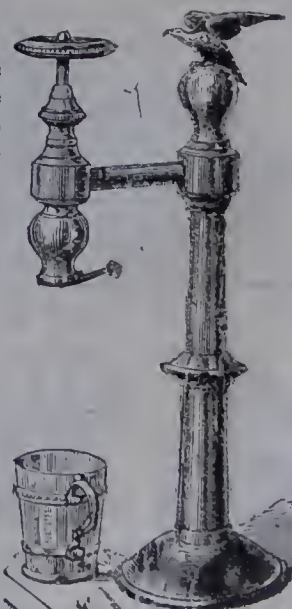
"The No. 2 'Compact' Soda Water Machine came to hand the day previous to the Great Annual Temperance Fête at Ball's Bridge, where it had an engagement to supply 15,000 visitors, or over 200 dozen of waters. I felt nervous, not having a knowledge of the machinery. However, I got it together without a hitch, and after two dozen being bottled, I cannot describe the weight I got from under. I saw that we could turn out double the quantity, as even with temporary fixing, it filled 42 dozen per hour, and with a better trained attendant, will, I am sure, go close on fifty. I wired you this afternoon to know when you can deliver another No. 2 Machine, for a party who came a distance to see it work to-day. Congratulating you on your success."

From Messrs. TURNER, SCHON & CO.,
101 Leadenhall Street, E.C.

"We thought we should have great difficulty in the manufacture of aerated waters to which we were absolute strangers. Now that your No. 1 'Compact' Machine is fitted up and we have had an opportunity of working it, we find it is simplicity itself, and are surprised it should be possible to put such an effective and complete machine into such small compass. We think the machine will prove a great success, and we shall be happy to show it to intending purchasers."

PILLAR FOUNTAIN.

For a Single Draught Arm fixed on Counter, as shown by this drawing, there is nothing more convenient, the great advantage of it is, that a small sharp stream of Aerated Water can be drawn, which, when Syrups are taken, is absolutely necessary, so as to mix up the Syrup with the Water first, and then a large stream, as in the emptying of a bottle of soda water can be drawn; where soda water alone is required, the latter retains its sharpness and pungency, and thus, by the use of this Draught Arm, there is no necessity of drawing the soda water into a bottle first, and then emptying it into a tumbler, thus is avoided the loss of gas, and also the loss of time; but by drawing direct into the drinking glass a more satisfactory result is obtained. It is of very solid construction and thickly plated.



Price **£4 7 6**

Send for Illustrated Catalogue "C," containing all preliminary information. Forwarded free on application to

BARNETT & FOSTER, "NIAGARA" WORKS, 26t Eagle Wharf Road, LONDON, N.

TO AERATED WATER MANUFACTURERS

HAY'S

SOLUBLE ESSENCES

REGISTERED

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

ESSENCES OF GINGER, LEMON, ORANGE &c.

Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medical Journals & from the Principal Trade Journals in this & other Countries.

HOP ALE AND GINGER ALE ESSENCES.

HAY MANUFACTURING CHEMIST BEVERLEY RD.

HULL

PRICE LISTS FREE ON APPLICATION.

REGISTERED
TRADE MARK
H.E. Constance



"INVIGORINE"

(REGISTERED TITLE).

THE NEW AERATED TONIC
Pleasant, Refreshing, and Invigorating.

Successful Wherever Introduced
Specially Useful in Hot Climates.

Retail 2/6, Wholesale 24/- Doz. net,
Through the Wholesale Houses or of

THE "INVIGORINE" MANUFACTURING CO.
114 Leadenhall Street, LONDON, E.C.

GOLD MEDAL, Amsterdam, 1883. DIPLOMA OF HONOUR, Paris, 1887.

GUÉRET FRÈRES,

MACHINISTS, PATENTEEs,

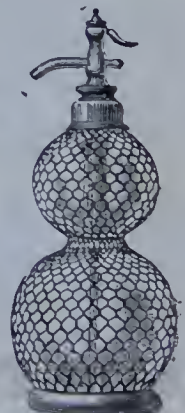
PARIS—72 BOULEVARD DE LA GARE, 72—PARIS.

SYPHONS WITH SHORT LEVER, with Metal Tops of Pure Tin, carefully mounted, and the glass of the *first quality*.

GAZOSELTZ, for the instantaneous production of Aerated Beverages at table. Anyone can use them.

"CONTINUOUS PROCESS" Apparatus complete, guaranteed without flaw in construction, possessing perfect action, and tested to a high pressure, while fulfilling every desirable condition of economy and sanitation.

OUR GENERAL CATALOGUE AND PRICE LIST WILL BE SENT FREE ON APPLICATION.



146 MINORIES LONDON E.C.
New York
Sydney
&c.

SODA WATER MACHINERY
AND ALL ACCESSORIES FOR THE TRADE

BRATBY & HINCHLIFFE, LIM.

HEAD OFFICE
SANDFORD ST. ANCOATS, MANCHESTER.

BOXES BOTTLES, MACHINERY,
ESSENCES
Catalogues Circulars Testimonials
Post Free



SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED



SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible)
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER,

And at 146 MINORIES. LONDON. E.C.

1ST.—COMPARE

DE CARLE'S SOLID FRUIT JUICES or RIPE FRUIT DRINKS
with Ready-made Bottled Syrups.

PRO.		CON.	
1 packet De Carle's Fruit Juice, retail price	... 4½d.	1½ pint Bottle Fruit Syrup at retail price	... 1s. to 1s. 3d.
1 lb. Sugar	... 2d.		
1 pint Boiling Water	... —		
<i>Result—</i>			
1½ pint superb Fruit Syrup, unqualified in flavour, for 6½d.			

2ND.—DECIDE

as to the Quality and Purity of DE CARLE'S SOLID FRUIT JUICES.

*ANALYTICAL REPORT by ARTHUR HILL HASSALL, M.D. Lond.,
Author of 'Food: its Adulterations, and the Methods for their Detection.'*

CHEMICAL LABORATORY, LONDON, April 2nd, 1890.

At the request of Messrs. De Carle & Son, Norwich, we have analysed samples of the Solid Fruit Juices supplied by them. Seven samples in all were tested—Raspberry, Orangeade, Lemonade, Pineapple, Cherry, Gingerade, and Limetta.

The results of the analyses have been perfectly satisfactory, as showing that these preparations are free from injurious or deleterious constituents, and that they have been carefully made from pure materials. Used according to the directions supplied, these various Solid Fruit Juices will furnish Syrups, Jellies, &c., of agreeable and wholesome characters.

Signed

ARTHUR HILL HASSALL, M.D. Lond.
EDW. GODWIN CLAYTON, F.I.O., F.C.S.

3RD.—BUY.

Latest unsolicited Testimony from Messrs. J. C. Nicholls & Co., General Warehousemen, Sherston, June 20th, 1890.

GENTLEMEN,—We have tried 6 doz. of your Solid Fruit Juices, and where introduced they give satisfaction, in fact, the best and cheapest drink we have ever sold. Please to quote lowest price and best terms for gross lots.

WRITE FOR SAMPLE AND TERMS TO THE SOLE MANUFACTURERS,

DE CARLE & SON, Manufacturing Chemists, NORWICH.

Agents—Foggitt, Thirsk, Evans, Gadd & Co., Exeter, and most London Houses.

LEMON-RASPBERRY

REGISTERED LABEL.

A delicious beverage, non-alcoholic and perfectly pure; guaranteed to be prepared from fresh and specially selected Fruit only.

LEMON-RASPBERRY is unrivalled for use with Mineral Waters.

LEMON-RASPBERRY is bottled in special bottles, and is attractive in appearance and agreeable in flavour.

SAMPLES & QUOTATIONS MAY BE OBTAINED ON APPLICATION FROM THE SOLE MANUFACTURERS,

A. MILLAR & CO.
THOMAS STREET, DUBLIN.

LONDON:
45 GIFFORD
STREET, N.

TRADE

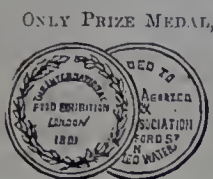
"CAMWAL"

TOPS THE TRADE

**HARROGATE,
BRISTOL.**

MARK.

TELEPHONE
NO.
7547.



LONDON, 1881.

RAISED BY THE
PERSISTENT ENERGY
AND GREAT CARE
OF CHEMISTS

Year	No. of Members	Dividend
1878	119	None
1879	350	None
1880	430	None
1881	540	None
1882	615	3½
1883	708	5

TELEGRAPHIC

Chemists Starbeck Harrogate

HIGHEST PRIZE MEDAL



BRADFORD, 1882.

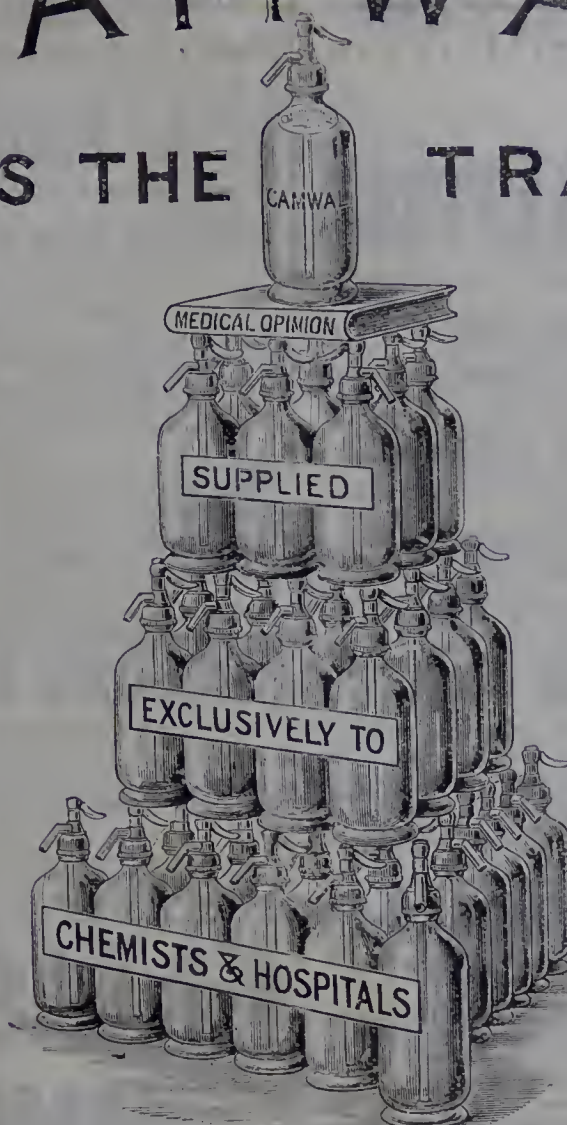
Telegraphic
Address
"RUBINE
LONDON."

STRENGTHENED AND
SUPPORTED BY THE
APPROBATION OF THE
MEDICAL PROFESSION

Year	No. of Members	Dividend
1884	908	6
1885	1,193	6
1886	1,463	6
1887	1,612	7½
1888	1,892	5
1889	2,031	7½

ADDRESSES

Chemists Sun Factory Bristol.



INCREASE OF SALES.—The Sales for the Half-year ending March 31, 1890, show an increase of 30 per cent. over the corresponding period of previous year.

This Company manufactures the various descriptions of Mineral Waters of the highest class and of specified formula, and now numbers over 2,000 Members. Good Dividends.

PRICES.

	In Corked Bots.	In Syphons.		In Corked Bots.	In Syphons.
Carbonated Water	1/-	1/6	Lime Juice	1/-	2/6
Soda	1/-	1/6	Ginger Ale	1/-	2/6
Soda	1/-	1/6	Ginger Beer, Glass	1/-	2/6
Potash	1/-	1/6	Lithia, B.P., 5 grains to Half-pint	1/6	2/6
Potash	1/-	1/6	Iron and Quinine Water	1/6	—
Seltzer	1/-	1/6	Mineral Acid	1/6	—
Lemonade	1/-	2/6			

Syphons, 24s. per dozen. Cases—3 dozen 3s. 6d.; 4 dozen 4s. 6d.; 6 dozen 5s. 6d. each. Empties allowed for at same prices.
3d. per dozen charged extra for the delivery of Syphons in London.

SYRUPS.

In 26-oz. bottles, handsomely labelled and capsuled. Raspberry, Strawberry, Cherry, Red Currant, Black Currant, Pine Apple, &c., 8/- per dozen. Lime Fruit Cordial, 8/- per dozen. Bottles charged 1/- per dozen, and allowed for on return.

A holder (Chemist) of £1 share is entitled to all the advantages of this Association.

SAMPLE CASE OF WATERS SENT FREE.

Handbills with Name and Prices supplied gratis to Shareholders.

The Chemists' Aerated and Mineral Waters Association, Limited,
LONDON, HARROGATE, & BRISTOL.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

GOODALL'S BAKING POWDER.

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S EGG POWDER.

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 6d., and 1s. each

GOODALL'S BLANCMANGE POWDER

Delicious Blancmange in a Few Minutes. Boxes, 6d. and 1s. each.

GOODALL'S QUININE WINE, B.P.

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

GOODALL'S GINGER-BEER POWDER.

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

GOODALL'S BRUNSWICK BLACK,

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles

GOODALL'S LAVENDER WATER.

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

GOODALL'S PLATE POWDER,

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 5s.

GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In 1/2-pint, 1-pint and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS.

A WONDERFUL SUCCESS!!

NON-INTOXICATING BEER

Made from MASON'S Original

EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound
ENLARGEMENT OF SIZE.A Sixpenny Bottle makes EIGHT GALLONS of
HERB OR BOTANIC BEERA NON-INTOXICATING BEVERAGE
Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

BEWARE of mean and fraudulent imitations.

BEWARE of others copying our title.

MASON'S is the original and only genuine.

MASON'S is a Special Compound entirely from Herbs.

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1s., & 2s. each, with directions.

MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

Sold in Bottles at 6d., 1s., and 2s. each.

Quotations on application.

SOLE INVENTORS &
MANUFACTURERS:NEWBALL & MASON,
Manufacturing Chemists and Botanic Druggists. NOTTINGHAM

ELLIS'S MINERAL WATERS

[1]

Sole Address: R. ELLIS & SON, RUTHIN, NORTH WALES.

GRANULAR EFFERVESCENT CITRO TARTRATE

KNOWN AS

CITRATE OF MAGNESIA

			No. 2.	No. 1.
1-lb., 2-lb., and 4-lb. Bottles	...	per cwt.	69/	80/
" " " " " "	...	per lb.	8/	9/
1/ Bottles	...	per doz.	4/9	5/
1-lb. Tins	...	"	9/	10/9
2-lb. Tins	...	"	17/	20/6

1-lb. Bottles, 2d.; 2-lb. Bottles, 4d.; 4-lb. Bottles, 8d.
charged and allowed for when returned.

CHAS. SOUTHWELL & CO., Dockhead, S.E.

GENERAL PRICE LIST ON APPLICATION.

JOHN SANGER & SONS

Patent Medicine
Vendors,



DEALERS IN
Druggists'
Sundries,

LOZENGES, MINERAL WATERS, PERFUMERY, AND TOILET REQUISITES.

NEW ADDENDA to Illustrated Price List will be issued shortly, and forwarded free upon application.

TRIAL ORDERS INVITED. A VISIT TO SHOW ROOM CONFIDENTLY SOLICITED.

Agencies of all kinds undertaken upon the most favourable terms.

Warehouse & Show Room: **489 OXFORD STREET, LONDON, W.**

KEARSLEY'S Widow Welch's FEMALE PILLS.

These are universally acknowledged to be the Genuine, and Druggists may safely recommend them.

CAUTION!

The Proprietors of Kearsley's Original Widow Welch's Female Pills find it incumbent on them to caution the purchasers of these Pills against various imitations by parties who have no knowledge of their peculiar preparation, the Original Recipe having been sold to the late G. Kearsley, of Fleet Street, whose Widow found it necessary to make an affidavit, for the protection of her property, in the year 1798. The Genuine Recipe for **Widow Welch's Female Pills** has been prepared by them for 100 Years! Chemists are particularly requested to remark that, as a testimony of authenticity, each bill of directions contains an affidavit, and bears the signature of "G. KEARSLEY," in writing, also engraved on the Government Stamp, and each box is wrapped in WHITE paper.

Price 2/6s. per Dozen, subject to usual Discount. Special Quotations to Shippers and for large quantities on application to

J. SANGER & SONS, 489 OXFORD STREET, LONDON, W.

In consequence of the **FIRE** on their Premises in **ST. ANNE STREET, LIVERPOOL**, on night of June 15 last,

CLAY, DOD & CO.
WHOLESALE DRUGGISTS,

Beg to intimate to their Friends that they are now *Prepared to Execute Orders,*
with promptitude, from their Warehouse,

13 BEAU STREET, CAZNEAU STREET.

Postal Address—**52 ST. ANNE STREET.**

THE OLDEST ESTABLISHED WHOLESALE HERBALISTS IN THE UNITED KINGDOM,
UPWARDS OF A CENTURY AND A HALF.

Prize Medals were Awarded to us at the Great International Exhibitions 1851 and 1862 for THE GENERAL
EXCELLENCE OF OUR GOODS.

BUTLER, McCULLOCH & CO.

COVENT GARDEN MARKET, LONDON,

WHOLESALE & EXPORT HERBALISTS & DRUGGISTS.

ALL KINDS OF HERBS, CULINARY AND MEDICINAL.

Barks, Roots, and Seeds packed to suit the Colonial and Foreign Markets.

Samples and Special Quotations to Merchants and Shippers.

PROPRIETORS OF THE WELL-KNOWN

"CROWN & THISTLE" BRAND.

REGISTERED TELEGRAPHIC ADDRESS—"ANTIQUITY LONDON."



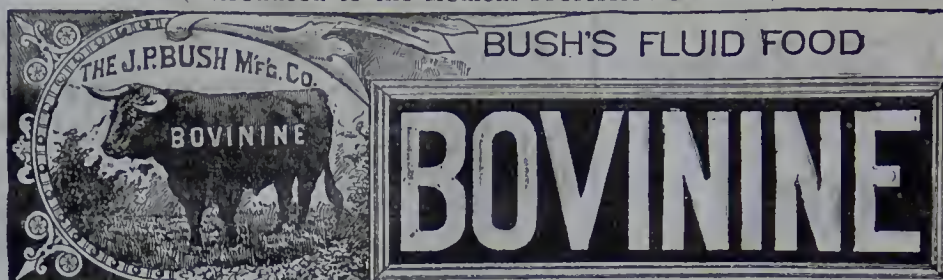
THE FIRST RAW FOOD EXTRACT.

(Introduced to the Medical Profession in 1878.)

AN IDEAL FOOD.

PALATABLE.

KEEPS
PERFECTLY.



CONTAINING
20 PER CENT.
OF
COAGULABLE
ALBUMEN.

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

BOVININE consists of the juices of lean raw beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteids in solution amount to twenty per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

BOVININE is entirely distinct from the numberless meat preparations prepared with heat. It is a Food, pure and simple, Highly Concentrated, and the most Nutritious yet presented.

TO CHEMISTS AND DRUGGISTS.

BOVININE has been prescribed and enthusiastically endorsed by thousands of Physicians and Surgeons in the United States and Canada for the past Twelve Years. We are systematically introducing **BOVININE** to the notice of the Medical Profession of Great Britain, and many are prescribing it daily. It is sold at prices within the reach of all.

TO BE HAD OF ALL WHOLESALE DRUGGISTS.

In Bottles, 12 oz. (4s. 6d. size), 38s. per dozen; 6 oz. (2s. 9d. size), 24s. per dozen.

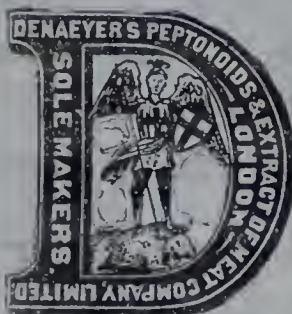
THE J. P. BUSH MANUFACTURING CO.

Laboratory at Chicago, Illinois. Principal Office, 2 Barclay Street, New York, U.S.A.

DEPOT FOR GREAT BRITAIN—32 SNOW HILL, LONDON, E.C.

TRADE MARK.

IMPORTANT NOTICE.



The following paragraph by Professor Dr. FURBRINGER, Head Physician of the *Städtisches Allgemeines Krankenhaus im Friedrichshain, Berlin*, appears in the printed report from the Directorate of the said Hospital:—

"Denaeyer's Peptone has at last been adopted as the new means of nutrition, after trials, which were made on a large scale with a quantity presented to this hospital, had proved the undeniable advantages of this Peptone over all other peptone preparations in use. Among these advantages, special mention should be made of the pleasant flavour—enjoyed by nearly all patients—and of its form, which is a beautiful clear, amber-yellow sterilised liquid, requiring no preparation before being used."

DENAAYER'S

LIQUID STERILISED PEPTONE OF MEAT.

Highly sterilised and concentrated, the only rational one, free from microbes, acknowledged the most efficacious means of restoring STRENGTH, DIGESTION, and APPETITE.

It suits the most fastidious stomach, and is pleasant to the taste.

LIQUID STERILISED PEPTONATE OF IRON.

The most active and assimilable of all ferruginous preparations. Specially recommended in all cases where the stomach cannot bear iron in the ordinary forms.

OF ALL CHEMISTS AND WHOLESALE DEALERS.

DENAAYER'S PEPTONIDS & EXTRACT of MEAT CO., Lim.

118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

20 RUE VANDERLINDEN, BRUSSELS.

General Agents for Scotland:—

Messrs. DUNCAN, FLOCKHART CO., Edinburgh.

THE OLD APOTHECARIES COMPANY, Limited, Glasgow.

"THE LANCET," July 12th, 1890.

CAFFYN'S LIQUOR CARNIS

"This is evidently a meat extract prepared in the cold and preserved by glycerine. It is extremely rich in nitrogen, and the ash contains phosphates in considerable quantity. So well are the soluble albuminoids of the meat preserved that the fluid when heated turns into a semi-solid jelly. It is really a valuable nutrient."

A VISIT TO THE WORKS.

"THE LONDON MEDICAL RECORDER," June 20th, 1890 :—
 "We are of opinion that some preparation of a natural product, that will appeal to common sense as well as practical knowledge, is required for patients who cannot assimilate solid animal food, if we are desirous of recuperating the impaired condition of invalids and those suffering from wasting diseases. A new preparation of beef has recently been introduced into England which, we believe, will help to fill the void that undoubtedly exists in this direction—viz., Dr. Caffyn's 'Liquor Carnis,' which is meat-juice obtained by a cold process. Anxious to make ourselves acquainted with the mode of manufacture of this preparation, we asked permission of the Managing Director of the Company, Mr. Shepperson, at the Offices on Holborn Viaduct, to be allowed to visit their factory at Deptford for the purpose named, and this permission was cheerfully accorded. We were led to believe that the process was a simple one, and we found it even more so than we expected. Entering the principal room, we saw a large cutting-up table, on which the meat is deposited. This meat used consists of the choicest parts of the hindquarters of the best bred and fed English or Scotch beef, no foreign animal being allowed to contribute its quota to the bulk. The meat is then placed on metallic trays, and deposited in a hydraulic press standing in the same room. Each section of the press has a channel around its four sides, with holes in the central portion through which the juice exudes, and is thence conveyed to the receiver at the lower part. Under a pressure of about 400 tons the pure meat-juice is soon seen making its way through the sections as described. The liquid is then poured into glass carboys securely sealed, which are placed on shelves around the room. It is then mixed with a definite proportion of carbo-hydrate, which not only supplies the amount of carbon necessary to a liquid so rich in nitrogen, or the bread to the meat as it were, but also acts as a permanent preservative. It is very soon ready for bottling, and this is effected by means of a glass syphon. The full bottles, placed in wooden trays, each holding the same number, are taken to an adjoining room, where they are corked by machinery, capsuled, labelled, and put up in cardboard

boxes ready to be sent out. The greatest cleanliness is observed throughout, and the hydraulic press and any vessels used in the process are cleansed and sterilised by steam every day. As a further security for ensuring absolute purity in the products during hot weather, a new press, fitted with ice-pockets at the sides, is in course of manufacture.

"As regards the nutritive value of 'Liquor Carnis,' it will be seen by our description that it is simply the pure juice of the finest beef, extracted cold and without alteration of its constituents, for the liquor contains albumen, fat, phosphates, lime, magnesia, and alkalies (soda and potash), thus giving flesh-forming and heat-producing elements, present in a form calculated to give a highly nourishing food in an easily assimilable condition, while the addition of the glycerine increases its nutritive value. We have seen a number of testimonials, strongly recommending 'Liquor Carnis,' from well-known medical men, who have prescribed it in private and hospital practice, and it is reputed to have been used with excellent effects in consumption and other wasting diseases, and in preference to cod-liver oil and iron. Professor Wanklyn says: "'Liquor Carnis' has a specific gravity of 1.1195, water at the same temperature being 1.0000; it contains *unaltered animal albuminoids*, and its value as food is very high. I am quite prepared to endorse the statement that Caffyn's 'Liquor Carnis' offers advantages which no other kind of invalid food has been found to possess."

Abstract from the "JOURNAL OF LARYNGOLOGY AND RHINOLOGY."

Edited by SIR MORELL MACKENZIE, M.D., LOND.,
 and R. NORRIS WOLFENDON, M.D., CANTAB.

July, 1890.

"A sample of the above preparation has been forwarded to us. It is described as 'meat juice obtained by a cold process, with the addition of a carbo-hydrate.' We have tried the preparation, and can speak highly of its nutritive value. Moreover, it is readily assimilable, and not unpalatable. We consider it a preparation of undoubted value in cases of wasting disease and of debility."

SPECIMENS SENT GRATIS.

THE LIQUOR CARNIS COMPANY, LTD.

General Offices: 50 HOLBORN VIADUCT, LONDON. Works and Factory: DEPTFORD, KENT.



TOWER TEA

OBTAINED THE

HIGHEST AWARD

FOR TEA AT THE

PARIS EXHIBITION.



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE APPOINTED BY



PRIZE MEDAL, PARIS, 1889.

THE GREAT TOWER STREET TEA CO., LIMITED
5 JEWRY STREET, LONDON, E.C.



PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION. MOST SALEABLE.

Delicious Flavour. Brilliant & Attractive Appearance.

SELLS AT SIGHT.

Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.

1/ Bottles, 9/ per doz.; 1-lb. Bottles, 20/ per doz.; and in 4-lb. Jars, 1/6 per lb.

HANDBILLS POST FREE ON APPLICATION.

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER,
JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

"MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and ¼, ½, 1 lb. Tins only.



TADDY & CO., 45 Minories, LONDON

ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.



Write for List of Specialities.

COMPARE, AND THEN DECIDE.

5/6 per Gross.



BOTTLE SHAPE.

MENTHOL CONES.



BOTTLE SHAPE.

5/6 per Gross.

On $\frac{1}{4}$ -Gross Show Cards, with Elastic. Sample Free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.



Sold by Chemists over 35 years.

Takes away all rank tastes from Butter, and prevents it turning RANCID in HOT WEATHER.

STOCKED BY WHOLESALE HOUSES
Boxes, 3d., 6d., 1s., 2s. 6d., and 7s. 6d.

Mint Street Works,
LINCOLN.

MILLAR'S BRITISH WINES.

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &c.

A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. ROYDANT & CO., 75 Acre Lane, Brixton. S.W.

"RAMORNIE." LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars..... per lb.	8/9	per doz.	81/0	2-oz. Jars..... per lb.	7/8	per doz.	11/8
$\frac{1}{2}$ -lb. Jars..... "	7/0	"	42/0	1-oz. Jars..... "	8/4	"	6/3
$\frac{1}{4}$ -lb. Jars..... "	7/8	"	21/9	$\frac{1}{2}$ -oz. Jars..... "	8/8	"	3/3

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Austro-Hungarian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

{ 6 lbs. Carriage Free

MAY, ROBERTS & CO.,
9 CLERKENWELL ROAD, LONDON, E.C.
 TELEGRAPHIC ADDRESS—"FEEDING BOTTLES LONDON."

ILLUSTRATED CATALOGUE, 1890,
DRUGGISTS' SUNDRIES, SURGICAL APPLIANCES,
PATENT MEDICINES, ETC., NOW READY.

POST FREE ON APPLICATION.



FEVRE'S
SELTZOGENES.

	2 PINT.	3 PINT.	5 PINT.	8 PINT.
Caned, each	7/	8/6	12/6	20/6
	2 PINT.	3 PINT.	5 PINT.	8 PINT.
Wired, each	6/6	7/9	11/9	18/9
£2 worth or more, 5 per cent. discount.				

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.
 Telegraphic Address—"FEEDING BOTTLES LONDON."

BUYERS ARE CAUTIONED TO SEE THAT THEY GET THE
GENUINE



DR. JOHN HOOPER'S PILLS,

Which may be known by the Name of the Inventor being on the Government Stamp.

Handbills and Show Cards will be sent on application to

MAY, ROBERTS & CO., 9 CLERKENWELL ROAD, LONDON, E.C.

AMERICAN BUYERS are particularly Cautioned !!

Telegraphic Address—"FEEDING BOTTLES LONDON."

"MAY-ROBERTS" WATER BATH,
REGISTERED.



This Water Bath will supply a long-felt want amongst Chemists and Perfumers, where small quantities of materials have to be dealt with.

The old form of Water Bath necessitates the use of a second vessel for pouring the melted Pomade, Cream, or other substance into the bottles or jars in which they are sold. In the "MAY-ROBERTS" Water Bath the earthenware bowl can be lifted out of the tin containing the boiling water, the process of cooling being thereby very much expedited, and the contents can be poured into the bottles or jars direct from the bowl. The Bath is also supplied with an earthenware cover.

1 PINT.	5 PINT.	10 PINT.	[1]
Each 3/0	5/6	9/6	

MAY, ROBERTS & CO.
9 CLERKENWELL ROAD, LONDON, E.C.

Telegraphic Address—"FEEDING BOTTLES LONDON."

Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

NOTE.—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of Page (A)	Foot of Page (F)	Foot of Page (M)	Foot of Page (S)
Acard, E. 56	Fink, F., & Co. 56	Liquor Carals Co. (Lim.) 21	Salvine Co. (The) 46
American Camera Co. 7	Fletober, Fletober & Stevenson 5, 57	Liverpool School of Pharmacy 6	Sanders, H. G., & Son 46
Anderson & Adams 42	Text 162	Lothhouse & Saltmer 32	Sanford & Son 56
Anglo-American Oil Co. (Lim.)	Fournier, Bon & Cie. 10	London Homœopathic Hospital	Sanger & Sons 19
Apollinaris Co. Cover	Fowler, E. 44	Medical School 6	Sauvats Co., The Text 162
Assistants Wanted. Col. Sup.	Franz Josef Water Co. 12	Lorenz, H. 56	Schoenfeld Freres 43
Austin & Co. 51	Froneh Hygienic Co. 34	Lozè, A., & Co. 12	Seabury & Johnson 32, 43
Australian Meat Co. 23	Fruneau, E. 56	Lunoburger Wax Works 66	Sequah (Lim.) 23
(B)	Fuerst Bros. 46	Lynch & Co. Cover	Shirley, A. W. 47
Baker, J., & Sons 52	(G)	(M)	Silicated Carbon Filter Co. Text 162
Baroett & Foster 12, 13	Gardner, W. 52	Manchester College of Phar-	Smith, S., & Co. 43
Beecham, T. 38	Gent & Co. Text 162	maoy 6	Smith, T. & H., & Co. 32
Billault 40	Gilbertson, H., & Sons 8	McFerran, J. A. 52	Snowdon, Sons & Co. 53
Blondeau & Cie. 9	Giles, Schabot & Co. 34	McKesson & Robbins 28	South London School of Phar-
Boehm, F. 38	Giraud Fils 57	Macquair, A., & Co. 57	maey (Lim.) 6
Bratby & Hinchliffe (Lim.) .. 15	Globe Chemical Co. 57	Mather, W. 45	Southall Bros. & Barelay 31
Burroughs, J. 53	Goodall, Backhouse & Co. 18	May & Baker Cover	Southwell, C., & Co. 18
Burroughs, Wellcome & Co. 29, 30	Goodall, E. F. 50	May, Roberts & Co. 24	Spratts Patent 55
Bush, J. P. Manufacturing Co. 20	Government Sanitary Co. 50	Millar, A., & Co. 16, 23	Stern, G., & G. 11
Bush, W. J., & Co. 41	Great Tower St. Tea Co. 22	Miscellaneous Advertisements	Sutton, W., & Co. 57
Butler, McCulloch & Co. 19	Greiff, R. W., & Co. 37	Coloured Supplement	Symington, T., & Co. 4
(C)	Greensill, T. S., & Son 57	Morse & Co. 56	(T)
Cadbury Bros. Cover	Grosgrun, C. 56	Morson, T., & Son 36	Taddy & Co. 22
Chemists' Aërated and Mineral	Gueret Frères 14	Moseley, D., & Sons 43	Tehbutt, F. 57
Waters Association (Lim.) .. 17	Guy's Tonic 38	Moss, J., & Co. Text 162	Thompson, C. 53
Clark, S., & Co. 48	(H)	Mouilla Liquid Soap Co. 57	Thompson, Walters, Hole & Co.
Clay, Dod & Co. 19	Hamilton & Co. 52	(N)	(Lim.) 49
Colthurst & Harding 54	Hargreaves, Dr., M.K., M.D. .. 6	Natal Drug Co. (Lim.) 40	Tombarel Freres 42
Cook, Edward, & Co. 58	Harker, Stagg & Morgan 32	National Chemical Co. 54	Tomlinson & Hayward 23
Critchley, T. 57	Harvey, J. & W., & Co. 53	Newball & Mason 18	Torrents Corks 56
Curtis & Co. 28	Hay, W. 14	Newbery, F., & Sons 27	Towle, A. P., & Son 33
Oyelostyle, Tbe, Co. 56	Hearn, E. A., & Co. 50	Noakes, B., & Co. Text 162	Tunbridge & Wright 54
(D)	Hearoo, Squire & Francis 30	Noris, Zahn & Co. 40	Tyrer, P. 23
Day & Sons 55	Holroyd, J., & Co. (Lim.) 52	(O)	(V)
Day, Son & Hewitt 54	Hooper & Co. Cover	Owens College 6	Vaccine Association 43
De Carle & Son 16	Horn & Son 56	(P)	Van Honten's Cocoa 15
De Luca, G. V. 43	Howards & Sons 33	Pascall, J. 22	(W)
Dee Oil Co. (Lim.) 44	(I)	Perken, Son & Rayment 7	Wilkin's Sheep Dip 54
Denaeys's Peptones and Ex-	Indian Tea Planters' Combina-	Phillips, G., & Co. 53	Wilsoa, J. 40
tract of Meat Co. (Lim.) 20	tion 56	Poulenc Frères 38	Woods, W. M. 44
Dinaeford & Co. 40	Iovigorine Manufacturing Co. 14	Powell, A. E., & Co. 39	Woolley, James, Sons & Co. Cover
Down, H., & Co. 55	Isaacs, I., & Co. 53	(Q)	Wright, Layman & Umney Text 162, Cover
Dukas & Co. 50	(J)	Quilliam, J., & Co. 57	Wyleys & Co. 35
Durrant & Co. 56	Jewsbury & Brown 46	(R)	(Y)
(E)	Jeyes' Sanitary Compounds Co. (Lim.) Text 162	Radam's Microbe Killer Co. .. 44	Youldon, E. 50
Elliman, Sons & Co. 3 Text 162	Johus, W. 38	Ricques & Cie. 40	(Z)
Ellis & Co. (Lim.) 56	(L)	Riddle, A., & Co. 57	Ziemer, B. W., & Co. 46
Ellis & Son 18	Lalor, Dr. 42	Robbins, J., & Co. 42	Zuccato & Woolf 6
Evans, Sons & Co. 40	Layang, R. C. 57	Robinson & Sons 56	
Evans, Lescher & Webb 40	Lincoln and Midland Counties	Robinson's Pills 56	
Text 162	Drug Co. 42		
Evans and Sons (Lim.) 40			
Exchange Column 10			

CLASSIFIED LIST OF ALL ADVERTISERS

Where Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

APERTD & MINERLS	AGNCIES ABROAD	BAKING POWDER	BOTTLE CAPPING	CAPSULES
Apollinaris Co. Barnett and Foster Chemists' Aërated Waters Association. Ellis & Son (Rathin) Franz, Joseph, Co. Hassall and Co. (Citric Acid Phospho) Hay, W. Aris and Co. Kimmond and Co. Jewsbury and Brown Mills and Co. (Bourne) Schacht, W., and Co. Taylor, T., and F. J. [See GINSENG ALL.]	Acard, Ed. Australian Drug Co. Bolsay Cooking and Co. (Japan) Felson, Grimwade and Co. (Melbourne) Fongera and Co. (New York) Kempthorne, Prosser & Co. N.Z. Lennon, B. G., and Co. Levy, Jules Natal Drug Co. (Limited) Noris, Zahn and Co. Peake, Allen and Co. Prosser, Taylor and Co. Roberts (Paris, ac.) Rooke, Tompsett and Co. (Mel- bourne) Sharland and Co. Soul, W. H., and Co.	Goodall, Backhouse & Co. BEEHIVE Bowdler, W. H., and Co. Lunberger Wax Bleaching Works BICARB. SODA Brunner, Mond and Co., Lim. Howards and Sons May and Baker BISMUTH, PREP. Hearon, Squire and Francis Hewlett and Sons Howards and Sons May and Baker Symes and Co. White, Alfred, and Sons	Beach, J., and Sons BOOKS Churchill, J. and A. Lewis, H. K. Muter, Dr. BOXES Austin and Co. (Cardboard) Ayrton & Saunders Onalmera, W. H. Noakes, B., and Co. Owen, J., Jr. Parmenter, I. W., & Co. Lim. Robinson and Sons BRUSHES Dukas and Co. Ellis & Co. (Lim.) Fordnam, W., and Sons, Lim. Kent, G. H., and Sons Mossley, David and Sons BUTTER COLR, &c. Clements, S. G., and Co. Jouneau and Jorgensen Oldfield, Pattinson and Co. Hearon, Squire, and Francis Tomlinson & Hayward	Denonal, J. (Medicinal) Duncans, Flockhart and Evans, Sons and Co. Fournier, Bon and Co. Hooper, B., and Co. CASTOR OIL Allen and Haubury Fuerst Bros. OSCARA SAGRADA Duncan, Flockhart and Co. Evans, Sons and Co. Ferris and Co. Moss, J., and Co. CATALOGUE May, Roberts and Co. Sanger and Son ONMENT May Bros. (Lim.) CHALK PRECIP. Dunn and Co. Levermore, Ang., and Co. White, A., and Sons CHLORIDE OF GOLD Rowland, L. CHLORIDE OF LIME Government Sanitary Co. National Chemical Co.
ACETIC ACID	ALKALOID	AMMONIA	AMMONIA	AMMONIA
Dunn and Co. Fuerst Bros. Morris and Gailard (Salts)	Howards and Sons (Glasgow) Smith, T. and H., & Co.	May and Baker. White, A., and Sons Woolley, Sons and Co.	May and Baker. White, A., and Sons Woolley, Sons and Co.	May and Baker. White, A., and Sons Woolley, Sons and Co.

CHEMICALS

Andreas, Oscar and Co.
Boehm, F.
Boehringer, C. F., and Sohne
Brunner, Mond and Co. Ltd.
Busb, W., Son and Co.
Dunn and Co.
Fletcher, Fletcher & Stevenson
Ferner, Brothers
Goodall, Backhouse and Co.
Green, R. W., and Son
Hill, A. S., and Son
Hodgkinson, Treacher and
Clarke
Howards and Son (Pharm.)
Kuhn, B.
Levermore, Aug., and Co.
Lofthouse and Saltmer
Lorenz, H.
May and Baker
Morris and Callard
Moss and Co.
Poulenc, Freres
Stern, G. and G. (Pamlin)
Smith, T. and H., and Co.
White, A., and Sons
Zimmermann, A. and M.

ORIENT PROTECT

Solport Bros.
Thompson, Walters, Hole and
Co. (Limited)
Wood, Vincent

CHLORODYNE

Davenport (Browne's)
Towle, A. F., and Son

CHLOROFORM, &c.

Dunnean, Flockhart and Co.
Macfarlan, J. F., and Son
Smith, T. and H., and Co.
Wright, Layman and Umney
Zimmermann, A. and M.

CITRIC ACID

Hassall & Co. (Phospho)

COCAINE-HYDRO.

Boehringer, C. F., and Sohne
Howards and Son

COCA WINE

Armbricht, Nelson and Co.
French Hygienic Soc.

COCOA & CHOCOLATE

Cadbury Bros.
Fry and Sons
Nestle and Co.
Van Houten's Cocoa

COD-LIVER OIL

Allen and Hanburys
Burroughs, Wellcome and Co.
Elli, A. S., and Son
Lofthouse and Saltmer
Oppenheimer Bros. and Co.
Smith, T. J.
Southall Bros. and Berclay
Woolley, Sons and Co.

COFFEE

Symington and Co. (Coffee
Essence)

COLSIBLE TABLETS

Bette and Co.
Brooks, Peel and Co.
Sanders, H. G., & Son

COMP. MEDICINES

Allen and Hanburys
Blyton, Astley and Co.
Burroughs, Wellcome and Co.
Farrar Bros.
Hooper, B., and Co.
Leo and Co.
Wyleys and Co.

CONFECTIONERY

Blyton, Astley and Co.
Gibson, E., and Sons
Kerfoot, T.
Pascall, J.
Warrick Brothers

CONCENT. LIQS.

Evans, Sons and Co.
Fletcher, Fletcher & Stevenson

CORN CURES

Seabury & Johnson (Plasters)
Thompson, M. F.
Young, H.

COTTON WOOL

Haynes, G., & Co. (Absorbent)
Robinson and Sons (Absorbent)
Singer, J., and Sons
Seabury and Johnson

CRUSHED LINSEED

Mumford, G. S.

DENTIFRICES

American Toilet Co.
Eau du Botot
Fentiman & Co.
Jewsbury and Brown
Lakeman, J. J.
"Salvia"
Sutton, O., and Co.
"The Alexandra" (Ziemer)
Thompson and Capps
Warrick Bros.
Woods, W. (Arecia Nut)
Wright, O., and Co.

DISINFECTANTS

Fletcher Bros. and Co.
Government Sanitary Co.
Hamilton and Co.
National Chemical Co.
Seabury and Johnson
Sanitas Co.

DISINTEGRATORS

Carter, J. H.

DOG MEDICINES

Spratt (Patent)

DRUGGISTS' SW.

Ayrton and Saunders
Baily, M., and Co.
Barclay and Sons (Limited)
Davy, Humphrey, & Co.
Evans, Lescher and Webb
Evans, Sons, and Co. (Savary)
Gilbertson, H., and Sons
Hill, A. S., and Son
Hockin, Wilson and Co.
Idris and Co.
Kay Bros. Ltd.
Lynch and Co.
Merk, J., and Co.
Marriot, E., and Co.
May, Roberts and Co.
Quelch, H. O.
Rankin, W., and Sons
Sanger and Sons
Schultz and Co.
Still, W. M., and Co.
Thompson, Walters, Hole and
Co. (Lim.)
Toogood, W.
Wood, Vincent

EAU DE COLOGNE

Farina, J. M.
Munrtin, Merla (Nun)

ELASTIC HOSIERY

Wood, V.

ELECTRIC APPAR.

Darton, F., and Co.
Gent and Co.
Orme and Co.

EMBOCATION

Ellimann, Sons and Co.

ENAMEL

Fordham, W. B., and Sons
(Lim.)

ENEMAS

Ingram and Son
Sanger and Son

ENGRAVERS

Barker, W., and Son
Corman, J. E. (Glass)

ESSENCES

Beckett, W.
Boehm, F.
Bratby and Hincliffe (Ld.)
Burgoyne, Burdidge and Co.
Bush, W. J., and Co.
Cammock, J.
De Carie and Son (Fruit)
Fitzsimmons and Pearnley
Goodall, Backhouse and Co.
Hay, W.
Idris and Co.
May and Baker
Millar, A., and Co.
Oldfield, Pattinson and Co.
Stevenson and Howell
Tyrer, P. (Anchovies)
Woolley, Sons and Co.

ESSENTIAL OILS

Boehm, F.
Bush, W. J., and Co.
Busb, W., Son and Co.
Cly, Dod and Co.
Cooking & Co. (Japan Pepper-
mint)
Cummock, J.
Evans, Sons and Co.
Fitzsimmons and Pearnley
Hodgkinson, Treacher and
Clarke
May and Baker
Stevenson and Howell
Symes and Co.
Tombarel Freres
Treath, R. O.
Warrick Brothers
Wright, Layman and Umney
Vogt, G., and Co.

ETHER

Duncan, Flockhart and Co.
Howards and Son
May and Baker
Robins, J., and Co.
White, A., and Son
Woolley, Sons and Co.
Wright, Layman and Umney

EXTRACTS, FLUID

Allen and Hanburys
Barber, G., and Co.
Burgoyne, Burdidge and Co.
Evans, Sons and Co.
Fletcher, Fletcher & Stevenson
Hearon, Squire and Francis
Hooper, B., and Co.
Moss and Co.
Potter and Clarke
Wright, Layman and Umney

EXTRACT, MEAT

Australian Meat Co.
Borrell (Limited)
Brand and Co.
Rush, J. P. Manufacturing Co.
Denney's Peptone and Ex-
tract of Meat Co. (Lim.)
Liebig Co.
Liquor Carnis Co. (Lim.)

BUCALYPTUS

Downie B. I. P. Co.

FILTERING

Doullton and Co.
Fordham, W. B., & Sons, Ltd.
Bilicated Carbon Filter Co.

FEEDING BOTTLES

Bremis, E. and Co., Ltd.
Evans, Sons and Co.
Hearn, E. A. and Co.
Hockin, Wilson and Co.
Kilner Bros.
May, Roberts and Co.
Thompson, Walters, Hole and
Co. (Limited)
Toogood, W.

FLY PAPERS

Ford, Shanland and Co.
Hockin, Wilson and Co.
Mather, W.
Tunbridge and Wright
Wilson, S.

FOOD (Infants & Invalids)

Allen and Hanburys
Baelz, R., and Co.
Brand and Co.
Bragg, J. L. (Charcoal Biscuits)
Bush, J. P. Manufacturing Co.
Goodall, Backhouse and Co.
Hearon, Squire and Francis
Liquor Carnis Co. (Lim.)
Mottershead & Co. (Benger's
Nestle, H. Food)

FORMULA

Brooks, T.

GINGER ALE

Hay, W. (Essence)
Mills, R. M., and Co.

GLUE

Deutschmann and Woronicki
Fordham, W. B., and Sons

GLYCERIN

Fink and Co.
Fuerst Bros.
Price's Candle Co.

GRANULAR PREP.

Curtis and Co.
Hearon, Squire and Francis
Hill, A. S., and Son
Kerfoot, T.

GUM

Fink & Co. (Arabic, &c.)
Deutschmann & Woronicki
Hyde, Nash and Co.
Levermore Aug., and Co.

HAIR PREP.

Cheesebrough Mfg. Co.
Edwards and Co.
Truefitt, H. P. (Limited)

HERB BEER MIXES

Newball and Mason
Oldfield, Pattinson and Co.
Potter and Clarke

HERBALISTS

Butler, McCulloch and Co.
Newball and Mason
Potter and Clarke

HOMOEOPATHIC

Keene and Ashwell
Leath and Ross
Thompson and Capper
Watson and Watts

HOP ALESSON

Hay, W.

HOSPITALS

London Homoeopathic

HYPOPHOSPHITES

Dunnean, Flockhart and Co.
Dunn and Co.
Fellows
Fletcher, Fletcher and Co.
Symes and Co.
Tyke and King

INHALERS

Anderson and Adams
Evans Sons and Co.
Godfrey and Cooke
Hockin, Wilson and Co.
Schulze, P., and Co.
Sprone Co., The
Still, W. M., and Co.
Toogood, W.

INSECTICIDES

Hockin, Wilson and Co.
Sanford and Co.
Shorey, J. F.
Steiner and Co.
Thompson, Walters, Hole and
Co. (Lim.)

INK [See MARKING]

Bewley and Draper
Dunnean, Flockhart and Co.

KITCHEN

Tyrer, P.

LARD

Ewen, J., and Sons

LEECHES

Fitch and Nottingham

LINT

Liverpool Lint Co.
Newsome, C.
Robinson and Sons
Seabury and Johnson

LIME JUICE

Idris and Co.
Riddle, A., and Co.

LOZENGES

Allen and Hanburys
Blyton, Astley and Co.
Gibson, E., and Sons (Menthol)
Hill and Son
Kerfoot, T.
Pascall, J.
Raimos and Co.
Warrick Bros.

MACHINERY

Beyer Freres.
Burroughs, Wellcome and Co.
Carter, J. H.
Cochran, E. P.
Holroyd, J., and Co. (Lim.)
McKerran, J. A.
Melin, O. (Capsuling)
Palau and Co.
Werner and Pfeiderer

MAGNESIA

Andreas, Oscar and Co.
Busb, W., Son and Co.
Dinnford
Henry, T. and W. (Calcined)
Hill and Sons, A. S.
Kerfoot, T. (Citrate)
Murray, Sir James, and Son
Quelch, H. O.
Southwell, C., and Co. (Citrate)

MALT EXTRACT, &c.

Allen and Hanburys
Baelz, R., and Co.
Burroughs, Wellcome and Co.
(Kepler's)
Hearon, Squire and Francis
Oppenheimer Bros. and Co.

MARKING INKS

Barber, G., and Co. (Crimson)
Hickinson, J.

MEDICINE CHSTS

Bentley, E., and Sons
Day, Son and Hewitt (Veteri-
nary)
Day and Sons (Veterinary)

MENTHOL

Al Menthol Depot, A. W.
Shirley, Proprietor
Cooking and Co.
Hockin, Wilson and Co.
Tyrer, P.

MERCURIALS

Fuerst Brothers
Howards and Sons
May and Baker

METHYLATED**SPIRITS**

Burroughs, J.
Harvey, J. & W., and Co.
Jones and Co.
Phillips, G., and Co.

METHYLENE

Robbins, J., and Co.

MICROSCOPES

Darton, F., and Co.
Perken, Son and Rayment

MILK

Nestle, H. (Condensed)

MIXING**MACHINERY**

Carter, J. H.
Gardner, W.
Werner and Pfeiderer

MORPHIA

Macfarlan, J. F., and Co.
Smith, T. and H.

MUSK

Chris, Antoine

OILS, PAINTS, &c.

Anglo-American Oil Co. (Lim.)
Colthurst and Harding
Fox, W., and Sons

ointment BASES

Burroughs, Wellcome and Co.
Cheesebrough (Vaseline)
Filce, E.
Urquhart & Co. (Petroleum
Jelly)

OPHTHALMIC

Fomies, Dr.

OPTICIANS

Darton, F., and Co.
Perken, Son and Rayment
Raphael and Co.

OTTO OF ROSE

Fuerst Bros.
Treath, R. C.

PAPAIN FINKLER

Kuhn, B.

PARALDEHYDE

Zimmermann, A. and M.

PATENT AGENTS

Horn and Son

PEPPERMINT OIL

Cooking and Co.

PEPSINE, &c.

Burroughs, Wellcome and Co.
Chassaling and Co.
Fletcher, Fletcher & Stevenson
Newbery F. & Sons (Liquor)
Warner and Co. (Liquor)

PATENT MEDIC

Armbricht, Nelson and Co.
Atkinson and Barber (Infant
Preserv)

Barclay and Sons (Limited)
Beckham, T. (Pills)
Edwards and Son
Evans, Lescher and Webb
Fennings (Powders)

Filce, E.
Globe Chemical Co.
Goodall, Backhouse and Co.
Grosgrain, O.

Guy's Tonic
Holloway (Pills and Oint.)
Hop Bittan Co. (Lim.)
Indian Tea Planters' Com-
bination

Invigorine Manufacturing Co.
John's Liver Pills
Lalor (Phosphodyne, &c.)
Lincoln (Clarke's Mix.)

May, Roberts and Co.
Newbery and Son
Powell, A. E., and Co.
Randam's Microe Killer Co.
(Lim.)

Roberts and Co. (Foreign)
Sequah (Limited)
Sutton, W., and Co.

PATENT MEDICNS

(Cont.)

Thompson, Walters, Hole and
Co. (Lim.)
Vogeler, The C. A. Co.
Wilson, A. (Hunt's Nerve)
Wilson, J. (Anti-Stiff)

PERFUMERY**FANCY SOAPS**

Bayley and Co.
Boucahan and Cie
Boehm, F.
Burroughs, Wellcome and Co.
Cheesebrough Muellering Co.
Chiswick Soap Co.
Cook, E., & Co.
Coward and Co.
Dee Oil Co. (Limited)
Deutschmann and Woronicki
Dunnean, Flockhart and Co.
Ewan (Soaps)
Farina, J. M.
Giraud Fils
Greensill, T. S., and Son
Mann, C. A., and Co.
Mouilla Liquid Soap Co., Ltd.
Newbery and Sons (Perfumes)
Osborne, Bauer & Cheeseman
Pear's Soap
Price's Patent Candle Co.
Rosa-Marine Manufg. Co.
Rouse & Co.
Sainsbury, S. (Lav. Water)
Shirley, A. W.
Thompson, Walters, Hole and
Co. (Lim.)
Treath, R. C. (Limited)
Vogt, G., and Co.
Warrick Brothers
West, T. (Oxell's Mosa)
Woolley, Sons & Co. (Powder)

PEROX. OF HYDR

Dunn and Co.
Robbins and Co.

PETROLEUM

Anglo-American Oil Co. (Lim.)
Dee Oil Co. (Limited) (Jelly)
Grindley and Co. (Jelly)
Hamilton and Co. (Jelly)
Snowdon, Sons and Co.

PHOTOGRAPHIC

Botwright and Grey
Darton, F., and Co.
Howards and Son (Chemicals)
Marion and Co.
Orme, J., and Co.
Perken, Son and Rayment
White, Alfred, and Sons

PINE PRODUCTS

Burroughs, Wellcome and Co.
Godfrey and Cooke
Stern, G. and G.

PILL MACHINES

Niblett, G. W.
Paley, N., and Co.
Pindar, J. W.
Toogood, W. (Coater)

PORCELAIN GOODS

Toogood, (E.C. Pots, regist.)

PILLS (Coated, &c.)

Allen and Hanburys
Anderson Apocaries Hall.
Beecman, Thomas
Blair's Gut Pills
Eade's Gout Pills
Evans, Sons and Co.
Frere, L.
Hill, A. S., and Son
Holloway's
Hooper's
Hearon, Squire, and Francis
McKesson and Sons
Newbery and Sons
Robinson's
Warner, W. R. & Co. (Coated)
Wyleys and Co.

PODOPHYLLIN, &c.

Keith, B., and Co.
Smith, T. and H., and Co.

PLASTERS

Evans, Sons and Co.
Johnson and Johnson
Mather, W.
Quilliam, J., and Co.
St. Dalmas, A. De
Seabury and Johnson
Thompson, M. F.
Young, H.

POLISHING

Bradley & Bourdas (Albatum)
Fordham, W. B., and Sons
(Limited)

Oakey, John, and Sons

PRINTING

Bowers Bros.
Corman, J. R. (Glass)
Cyclostyle Co.
Ford, Shapland and Co.
Silverlock, H.
Townsend, J.
Zuocato and Woolf.

PUMILINA

Stern, G. and G.

PHARM. PREPS.

Allen and Hanburys
Barron, Squire and Co.
Billault
Boehun, P.
Brady and Martin
Burgoyne, Burbridge & Co.
Burroughs, Wellecome & Co.
Chassaling and Co.
Dee Oil Co. (Limited)
Deutschmann & Woronicki
Duncan, Flockhart and Co.
Fellows
Ferris and Co.
Fletcher, Fletcher and Co.
Fournier, Bon and Cie
Frumeau, E.
Giles Schacht & Co.
Greiff, R. W., and Co.
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hooper, B., and Co.
Howards and Sons
Jeyes Sanitary Compounds Co.
Keith & Co. (Cone, Linetures)
Lorenz, H.
Martindale, W.
May and Baker
Morton, T., and Son
Potter and Clarke
Rankin and Borian
Ricques and Co.
Roberts and Co.
Southall Bros. and Barclay
Sutton, W., and Co.
Symes and Co.
Trommsdorff, H.
White, Alfred, and Sons
Willows, Francis and Butler
Woolley, Sons and Co.
Wyleys and Co.

RENNET

Clements, S. G., and Co.
Dunnean, Flockhart and Co.
Johnsen and Jorgensen
Oldfield, Pattinson and Co.

SACCHARIN

Allen and Hanburys
Burroughs, Wellecome and Co.

SALICYLIC ACID

Fuerst Bros. (Kolbe's)
Morton, T., and Son
Zimmerman, A. and M.

SALT

Stern, G. & G. (Pepsalia)

SALICIN

Macfarlan and Co.
Smith, T. and H., and Co.

SALOL

Kahn, B.

SAUCES, PICKLES

Goodall, Backhouse and Co.
Tyrer, P.

SEALING WAX

Stewart, G., and Co.

SCHOOLS, &c.

City School of Chemistry and Pharmacy (Lim.)
Liverpool School of Pharmacy
London Homoeopathic and Medical School
Manchester College
Owens College
South London School of Pharmacy, Lim.
The School of Pharmacy
Westminster College

SILTZOGENES

Brady and Hinchliffe, (Ld.)
Durafor
Evans, Sons and Co.
Fevre, T.
Geraut, E. and Co.
Lynch and Co.
May, Roberts and Co.
Thompson, Walters, Hole and Co. (Limited)

SHEEP DIP

Fletcher Bros. and Co.
Hamilton and Co.
Wilkin's

SHOP FITTERS

Bowling and Govier
Bygrave, J. and W.
Evans, Sons and Co.
Hewlett, S.
Natali, E. (Show Cases)
Pothe, H., and Co.
Treble, G., and Co.
Yates, W. S.

SOAP

Ayrton and Saunders
Rayley and Co.
Blondeau and Co. (Vinolia)
Oblawick Soap Co.
Cook, E., and Co.
Ewen, J., and Son
Fordham, W. B., & Sons (Ld.)
Lucas and Co.
Pears' Soap
Stern, G. and G.

SPONGE

Cresswell Bros.
Marks, H., and Sons (Ld)
Peterson, M., and Co.

SPECTACLES

Botwright and Grey
Darton, P., and Co.
Perken, Son and Rayment
Raphael and Co.

SPIRIT

Burroughs, J. (Pure & Methyl)
Harvey, J. and W., and Co.
Jones and Co. (Methyl)
Macnair, A., and Co.
Phillips and Co.
Smith, Stephen and Co.

STAMPS (RUNNER)

Hekleson, J.
Pollard, A. W.

STARCH

Beckett, S.
Ortchley (Gloss)

STOPPERS

Austin and Co. (Sprinklers)
Barnett and Foster
Sanders, H. G., and Son

STOVES

Clark, S., and Co. (Lim.)

SUGAR

Gibson, R., and Sons

SURGICAL

Ayrton and Saunders
Bailey, W. H., and Son
Barclay and Sons (Limited)
Cooking, J. T.
De Luca, G. V.
Eshmann Bros. and Walsh
Haywood, J. H.
Ingram and Son
Liverpool Patent Lint Co.
Mestivier and Co.
Robinson and Sons
Schutze, P., and Co.
Schoenfeld Freres
Still, W. M., and Co.
Thompson, Walters, Hole and Co. (Limited)
Wood, Vincent

SULFONAL

Burroughs, Wellecome and Co.
May and Baker

SYPHONS

Barnett and Foster
Brady and Hinchliffe (Ld.)
Durafor
Pavarger and Co.
Fevre, T.
Geraut, E., and Co.
Kilner Bros.

SYRINGES

De Luca, G. V.
Schoenfeld Freres

SYRUPS

Fletcher, Fletcher (Liquors)
Idris and Co.

TILL

Gledhill, G. H.
Stokes, G. K. & Co.

TEA

French and Langdale
Gt. Tower St. Tea Co.
Walker and Dalrymple

THERMOMETERS

Bailey, W. H., and Son
Darton, P., and Co.
Perken Son and Rayment

TINS

Noakes, B., and Co.

TOBACCO, CIGARS**CIGARETTES**

Lynch and Co.
Paseock, M. & R.
Singleton and Cole (Lim.)
Taddy and Co.

TOILET

Evans, Sons and Co.
Fordham, W. B., and Sons (Lim.)
Fowler, E.
Layng, R. C.
Morse and Co. (Ivorine)
Mumford, G. S.
Quelch, H. C.
Truefitt, H. P. (Limited)
Woolley, Sons and Co.

TOOTH PASTE

American Toilet Co.
Jewson and Brown
Sutton, O., and Co. (Block)
Wilson, A. (Bunter's)
Woods, M. (Arecas)

TRADE MARKS

Horn and Son

TYPE-WRITING

Pollard, A. W.

TRUSSES

Bailey, W. H., and Son
Haywood, J. H.
Mather and Co.
Thompson, Walters, Hole and Co. (Lim.)
Wood, V.

URETHANE

Howards and Sons

VACCINATION

Vaccine Association (Lymph)

VALUERS AND**TENSPR. AGENTS**

Berdoo & Co.
Brett, F. J.
Crocker, G. B.
Orridge and Co.

VASELINE

Chesabrongh Manufacture Co.

VERMIN KILLERS

Sanford and Son
Steiner and Co.

VINOLIA

(Superfatted Medical and Toilet)
Blondeau and Co.

VETERINARY

Bigg, T.
Day and Sons
Day, Son and Hewitt
Down, H., and Co.
Evans, Leasher and Webb
Elliman, Sons and Co.
James, W. H. (Busters)
Rookledge, J.
Spratts (Dogs)
Sutton, F., and Co.
Wyleys and Co.

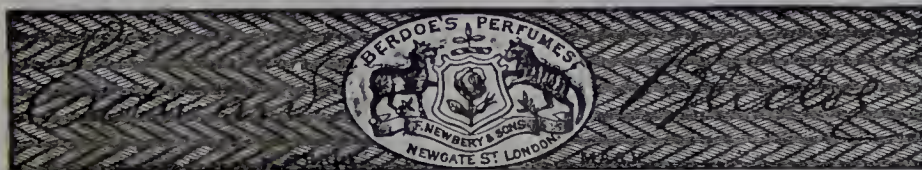
WHOLESALE AND**EXPORT DRUGS**

Allen and Hanburys
Barron, Harveys and Co.
Burgoyne, Burbridge and Co.
Hush, W., Son and Co.
Hush, W., and Co.
Clay, Dod and Co.
Coward, G. F., and Co.
Davy, Humphrey, and Co.
Evans, Sons and Co.
Evans, Leasher and Webb
Evans and Sons (Limited)
Ferris and Co.
Fox, W., and Sons
Goodall, Backhouse and Co.
Harker, Stagg and Morgan
Hearon, Squire and Francis
Hewlett and Son
Hill, A. S., and Son
Hodgkinson, Treacher
Clarke
Lofthouse and Saltmer
Macfarlan, J. P., and Co.
Oldfield, Pattinson and Co.
Potter & Clarke
Symes and Co.
Thompson and Oapper
Thompson, Walters, Hole and Co. (Limited)
Walker, Troke and Co.
Willows, Francis, and Butler
Woolley, J. A., Sons and Co.
Wright, Layman and Umney
Wyleys and Co.

WINES, SPIRITS

Coleman and Co. (Meat and Durrant, G. (Orange) Malt.
Goodall, Backhouse and Co.
Idris & Co.
Millar, A., and Co.
Robinson, B.

BERDOE'S TRIPLE FRENCH PERFUMES



THESE PERFUMES have been known to the trade for many years past, and their steadily increasing sale is the best proof of the appreciation in which they are held. Notwithstanding that the prices of some brands of perfumes have been reduced, F. NEWBERY & SONS find it both impossible and needless to offer any other advantages to buyers than—(1) the excellent quality of the Perfumes themselves, (2) their price. The object kept in view is not to produce goods which may be sold at a given price and leave a given margin of profit, but to produce such as shall equal or surpass a given standard of quality.

BERDOE'S TRIPLE

In PLAIN STOCK BOTTLES of 20 oz., 10 oz., and 5 oz.

		£	s.	d.
Ess. Bouquet	.. .. .		
Frangipane	.. .. .		
Jasmin	.. .. .		
Jockey Club	.. .. .		
Millefleurs	.. .. .		
New Mown Hay	.. .. .		
Opoponax	.. .. .		
Patchouli	.. .. .		
Rondeletia	.. .. .		
Stephanotis	.. .. .		
Ylang Ylang	.. .. .		
	per 20 oz.,	0	8	7
	per 10 oz.,	0	4	4
	per 5 oz.,	0	2	3

**FRENCH ESSENCES.**

		£	s.	d.
Violets	.. .. .		
Wood Violet	.. .. .		
White Rose, 20 oz., 9s. 10d.; 10 oz., 5s. 1d.; 5 oz., 2s. 7d.				
Eau de Cologne	.. .. .		
Lavender Water	.. .. .		
	per 20 oz.,	0	4	4
	" 10 "	0	2	3
	" 5 "	0	1	2

Berdoo's Perfumes, in Handsome Show Bottles for the Counter, Rose Cut Stoppers, Vitrified Opal Shield Labels with Gold Border and Black Letters, from 11s. 6d. each.

The above are the leading Essences, and to these the special attention of customers is asked. Those who desire greater variety will find in "Newbery's Catalogue" a more extended list.

F. NEWBERY & SONS,

Established A.D. 1746.
1 & 3 KING EDWARD STREET, LONDON, E.C.

NOTE REDUCED PRICES OF QUININE PILLS.

LIST OF "McK. & R." CAPSULE^D PILLS

OF THE BRITISH PHARMACOPŒIA AND OTHER STANDARD AUTHORITIES.

McKESSON & ROBBINS,
 WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,
 ESTAB. 1833.] **NEW YORK, U. S. A.** [ESTAB. 1833.

Supplied by the Principal Wholesale Houses in the Trade throughout Great Britain and Ireland.

The reputation of Gelatine-Coated Pills has been created by our manufacture.	DOZ. BOTTLES containing/containing		Being completely sealed, all substances are perfectly preserved from oxidation.	DOZ. BOTTLES containing/containing	
	25 PILLS.	100 PILLS.		25 PILLS.	100 PILLS.
Atoin	5/	16/	Quinine, Bisulphate	5/	16/
"	6/	20/	"	5/	16/
"	7/	24/	"	5/8	18/
"	11/	40/	"	7/6	28/
" Compound	7/	24/	"	9/8	34/
" and Strychnine	7/	24/	"	11/8	42/
" Strychnine and Belladonna	7/	24/	" Sulphate	5/	16/
" or Aperient, No. 1 (Clark)	9/	32/	"	5/	16/
" No. 2, No. 3, No. 4	7/	24/	"	6/	20/
" Morphine Muriate	7/	24/	"	8/	28/
"	9/	32/	"	10/	38/
" Narcotic Extracts (Brown-Sequard)	15/	58/	"	12/	44/

A Complete List of Formulas and Prices will be mailed promptly on application.

In ordering, be careful to specify "McK. & R." CAPSULED PILLS.

Originated 1870, by McKESSON & ROBBINS, New York, U.S.A. Merchants, Shippers, and the Wholesale Houses in the Trade are supplied by Messrs. S. MAW, SON & THOMPSON, 7 to 12 Aldersgate Street, London, E.C.; Messrs. BURROUGHS, WELLCOME & CO., Snow Hill Buildings, London, E.C.; and Messrs. HOCKIN, WILSON & CO., 38 Duke Street, Manchester Square, London, W.

CURTIS & Co's EFF. BISMUTH, PEPSINE & STEEL

(Formerly YOUNG & POSTANS).

GRAN. EFFER. BISMUTH AND PEPSINE
 GRAN. EFFER. BISMUTH, PEPSINE AND STRYCHNINE
 GRAN. EFFER. BISMUTH, PEPSINE AND QUININE
 GRAN. EFFER. BISMUTH, IRON AND QUININE
 GRAN. EFFER. BISMUTH CITRATE
 GRAN. EFFER. BISMUTH, IRON AND STRYCHNINE
 GRAN. EFFER. CITRATE OF CAFFEINE.

GRAN. EFFER. IRON AND BISMUTH
 GRAN. EFFER. IRON, QUININE AND STRYCHNINE
 GRAN. EFFER. IRON AND ARSENIC
 GRAN. EFFER. IRON AND PEPSINE
 GRAN. EFFER. IRON AND QUININE
 GRAN. EFFER. IRON, QUININE AND PEPSINE
 GRAN. EFFER. HYDROBROMATE OF CAFFEINE.

AND ALL OTHER GRANULAR PREPARATIONS.

GRANULAR EFFERVESCENT ANTIPYRIN

(ORIGINATED AND INTRODUCED BY CURTIS & CO.).

See that all these preparations bear the name of
CURTIS & CO., 48 Baker Street, Portman Square, LONDON, W.



SEQUAH'S OIL.



SEQUAH'S PRAIRIE FLOWER,
 AND
 Sequah's Oil.

Prepared solely by

SEQUAH, LIMITED.

PEPTONISED MILK

IS SWEET AND PALATABLE

When prepared as directed with

ZYMine (EXTRACTUM PANCREATIS)

FAIRCHILD.

ITS PREPARATION
COSTS LESS THAN A PENNY A PINT.

ZYMine (EXTRACTUM PANCREATIS), FAIRCHILD is a *dry powder*, containing in the most active and concentrated form all the Enzymes of the Pancreas, viz.: TRYPSIN, AMYLOPSIN, STEAPsin, and the RENNET FERMENT.

IT WILL DIGEST ALL KINDS OF FOOD: 5 grains, with a little soda, will sufficiently peptonise a pint of milk in a few minutes; 30 grains, with a little soda, will peptonise 4 ozs. of beef, producing a concentrated, nutritious, and delicious beef tea.

ZYMine PEPTONISING POWDER (FAIRCHILD), in glass tubes, is the most convenient form for preparing peptonised milk, gruels, jellies, custards, blanc-manges, etc., etc.

THE INSTRUCTIONS given in one of our direction slips enable even *inexperienced domestics* to quickly prepare any peptonised food.

This Powder is admirably adapted for use with the Thermo-Safeguard Feeding Bottle, pronounced by the *Edin. Med. Journal* "the best of all feeding bottles."

FOR NUTRITIVE ENEMATA, any food can be thoroughly pre-digested with Zymine (Extractum Pancreatis); it is then readily absorbed by the rectum.

THE TABLOIDS OF ZYMine (EXTRACTUM PANCREATIS) afford the most convenient form for direct internal administration. They are pleasing, and can easily be carried about in the pocket. Now extensively used as a food aid in intestinal derangements.

While the Zymine Peptonising Powders are the most *elegant* and *convenient* form for peptonising milk, they are somewhat more expensive than the simple Zymine; where cheapness is of first importance the latter may therefore be used.

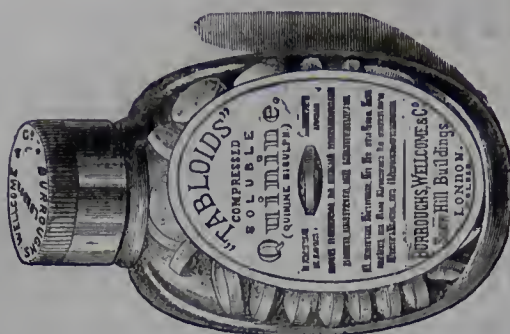
Zymine (Extractum Pancreatis) supplied to the Trade in ½-oz. and 1-oz. bottles, 20/ and 60/ per doz.
 Zymine Peptonising Powders supplied to the Trade in boxes of 12 tubes, 18/ per doz. boxes. One tube peptonises a pint of milk.
 Zymine Tabloids, 3 grs. each, and Zymine Comp. Tabloids, supplied to the Trade in bottles of 25 and 100, 18/ and 48/ per doz.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

ABOVE PRICES SUBJECT TO USUAL DISCOUNT.

QUININE TABLOIDS.

The Tabloids of Compressed Soluble Quinine are now prescribed by the leading physicians of Europe in preference to any other form of the drug, in the treatment of fevers and all other cases in which Quinine is



indicated. They dissolve and act on the system quicker than ordinary pills or powders, they are easier to swallow, and can be dispensed by Chemists at the same price that they charge for powders.

Quinine Bisulphate, 3 gr., Vinalgrette style (oval	Ret.	Doz.
bols., 50 in each) ...	1 1/2	50
" " 100 in bottle ...	1 1/2	120
" 1 gr., Vinalgrette style (oval		
bols., 36 in each) ...	1 1/2	50
" 1 gr., 100 in bottle ...	1 1/2	150
" 2 gr., Vinalgrette style (oval		
bols., 24 in each) ...	1 1/2	50
" 3 gr., 100 in bottle ...	2 1/2	150
" 3 gr., Vinalgrette style (oval		
bols., 24 in each) ...	1 1/2	120
" 3 gr., 100 in bottle ...	3 1/2	270
" 5 gr., Vinalgrette style (oval		
bols., 24 in each) ...	4	160
" 5 gr., 100 in bottle ...	5 1/2	430
{ Quinine Bisulphate, 1 gr. } { Ferri Hypophosphite, 2 gr. } { Strychnine Sulphate, 1/10 gr. }		
" 100 in bottle.....	4 1/2	360

Supplied by all Wholesale Houses.

Above Prices subject to usual Discount.

BURROUGHS, WELLCOME & CO.
Snow Hill Buildings, London, E.C.

HEARON, SQUIRE & FRANCIS,

Analytical & Manufacturing Chemists,

WHOLESALE AND EXPORT DRUGGISTS.

SELECT PREPARATIONS—"HERON" BRAND.

APPLICATION FOR SAMPLES INVITED.

ESS. PRO MIST. FERRI CO.

PEPSIN GLYCER. ACID.

LIQ. SANTAL CO.

SOL. BISMUTH. AROMAT

LIQUOR IPECAC. PRO VINO.



TRADE MARK.

INFANTS' FOOD, MALTED.

EXTRACT OF MALT IN VACUO.

CASCARA CORDIAL.

LIQUID BUTTER COLOURING.

SOL. PEPSIN c. EUONYMIN.

Chemicals Examined as to Purity and
Strength
before being passed into Stock.

Latest Remedies in Pharmacy and
Therapeutics.
Standardized Drugs and Preparations.

38 SOUTHWARK STREET, S.E.
(LATE 5 COLEMAN STREET, LONDON.)



ESTABLISHED 1859.

PRINCIPAL OFFICE, 43 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

Literary Contents.

PAGE	PAGE
British Medical Association:	French Pharmaceutical News.. 155
Annual Meeting	Fuller's Earth Union
Commentary	Gazette
Correspondence:—	Lawyers on Pharmaceutical
Shop Hours; Manchester	Law
Pharmaceutical Association; The Extra Spirit	Legal Reports
Duty; Non-Substitutes .. 176	Obituary
Dispensing Notes	Oleite. By W. A. H. Naylor .. 163
Legal Queries	Personalities
Miscellaneous Inquiries 177	Railway Rates
Editorial Notes:—	Shop Hours
The Irish Pharmacy Bill ... 132	The Irish Pharmacy Bill
Successful Trials Journalism 1-3	The President's Campaign 150
A Qualification for Assistants 165	Trade Notes
Examinations in July	Trade Report

THE subscription to THE CHEMIST AND DRUGGIST is 10s., which includes the numbers for a whole year, a copy of THE CHEMISTS' AND DRUGGISTS' DIARY next published, and postage to any part of the world. Orders and cheques should be made payable to Edward Halse.

BOOKS FOR EVERY CHEMIST.

WE publish three books which every chemist and druggist who has a wholesome regard for his personal and business interests should not fail to secure. They deal with the analytical, legal, and practical departments of pharmacy. The *analytical* is covered by Mr. B. S. Proctor's "Manual of Pharmaceutical Testing" (2s. 6d., post free 2s. 9d.), which contains easily applied tests for all pharmacopoeial chemicals, none of which require the resources of a chemical laboratory—simply the measures, &c., used at the dispensing-counter. The *legal* side is dealt with by Mr. Alpe, of Somerset House, in his interesting "Handy-book of Medicine Stamp Duty," price 2s. 6d. or by post 2s. 9d. The *practical* section of pharmacy, viz. dispensing, is very well looked after in "The Art of Dispensing," which is one of the most popular books in English pharmaceutical literature. It is published at 3s. 6d. and is sent by post for 3s. 10d. Nearly all the wholesale houses stock these books and supply them at the published prices.

General News.

A COMBINATION FALLEN THROUGH.—The proposed combination of American soda-water apparatus manufacturers is said to have fallen through.

A NEW REMEDY.—The aniline factory, "Farbwerke" in Höchst-on-the-Main, have entered the word "Anæsthesin" on the German trade-marks register for a new anæsthetic.

COMBINATIONS IN BRAZIL.—A number of soap and candle manufacturers met on July 24 in Rio, and agreed to form a "trust" under the name of "Companhia Industrial de Sabão e Velas."

AMERICA AND THE BERLIN CONGRESS.—The *Columbia*, the new and swift vessel of the Hamburg line, which sailed from New York on July 17, had on board sixty medical men, the American contingent to the International Medical Congress in Berlin.

POISONED BY EYE-LOTION.—On July 29, William Watt died at the police station, Sunderland, through drinking a quantity of eye-lotion the previous day. The deceased had been drinking heavily, and when asked why he had taken the lotion, said it was quite as good as whisky.

AMMONIA-POISONING.—At Keighley last week Mrs. Mary Gill, the wife of a carting agent, who had been in a depressed condition for some time, went with a cup to a grocer's for a pennyworth of liquid ammonia, which she afterwards drank, dying on Wednesday. The facts came out at an inquest held on Thursday, when the jury returned the usual verdict.

STATUE TO LIEBIG.—At Giessen, on July 23, a new monument of Justus Liebig was unveiled in presence of a large assembly. The statue is more than life size, and both sides of the base are adorned with two allegoric figures, representing "Science" and "Culture." The monument is in white marble, and will be counted among the most beautiful of Germany's works of art.

POSTCARDS.—In the House of Commons, on Wednesday last, Mr. Hozier asked the Postmaster-General whether ordinary correspondence cards with a halfpenny stamp affixed could be sent through the post instead of the official postcards. Mr. Raikes gave a reply in the negative, saying that no cards but postcards could bear communications of the nature of a letter without becoming liable to letter-postage.

OWENS COLLEGE.—In the pharmaceutical department of this college an entrance exhibition of 10% will be offered for competition in October to pharmaceutical students. The subjects of the examination will be elementary botany and chemistry. Candidates must give notice to the registrar of their intention to compete on or before September 20. A scholarship of 10% and a prize of 5% will be offered at the end of the winter session. Mr. W. Kirkby has now entered upon his duties as assistant lecturer in the pharmaceutical department of the college.

ATTEMPTED SUICIDE BY POISONING.—Last week Emily Webster, 20, a domestic servant, of Benthall Road, Stoke Newington, was charged at the North London Police Court with attempting to commit suicide by taking a quantity of liniment composed of ammonia and belladonna. The girl's master and mistress had gone to the seaside, and whilst out walking one night she lost a valuable dog belonging to them. It was said the loss preyed on her mind to such an extent as to cause her to attempt suicide. She was remanded for the attendance of her relatives.

COMBINATION OF LABEL-MAKERS IN AMERICA.—The four largest concerns in the United States engaged in the manufacture of labels have formed a combination, according to the *O. P. & D. Reporter*. The label makers do a business of \$2,000,000 a year, and three-fourths of it is in the hands of the four corporations. Some five years ago about a dozen concerns in the business formed the Label Manufacturers' Association, with the object of maintaining a uniform scale of prices, but after a few months schedule prices were cut by some members, and the association went to pieces.

A CHEMIST ROBBED.—At the Hove Petty Sessions, on July 28, John Arch, an errand boy, in the employ of Mr. E. Caton, chemist, Waterloo Street, Brighton, was charged with stealing 4*l.* from his master's shop. The prisoner pleaded guilty, and expressed sorrow for what he had done. Mr. Caton then asked the magistrates to be lenient with him as it was the boy's first offence, and he had been somewhat careless in not placing the key of the drawer in a more secure place. The magistrates, on this recommendation, bound the prisoner over to come up for judgment when called upon.

SHEFFIELD PHARMACEUTICAL CRICKET CLUB.—The first result of the early-closing movement recently established here is that a cricket club has been formed by young chemists, and they are appealing for funds. On Thursday the club had its first match, the assistants meeting the principals and beating them by the narrow majority of 2; but the latter proved to be the better fielders, only letting the assistants score 3 for extras, whereas the principals had 8. Hufton and Dyson for the assistants got into double figures, and Crossley for the principals made the top score—24. 52 and 50 were the totals.

THE MAN WHO TOOK THE NAME OF EPPS.—At the County of London Sessions at Newington, before Sir P. H. Edlin, Q.C., chairman, on July 17, Alfred Harcourt, who was charged with having stolen 23*l.* from Mr. Mira Lal Kumar, was found guilty. The charge was that the prisoner, who had traded as Epps & Co., had advertised Cura-Cene, or wine of ozone, in the prosecutor's paper, the *Indian Appeal*; that being pressed for payment, he handed this money to prosecutor and snatched it from him when he had obtained the receipt. Sentence was postponed till next Sessions for further inquiries to be made.

CARBOLIC-POISONING.—An inquest was held at Chatham on Wednesday of last week touching the death of Ann Newman, 15 years of age, who died from the effects of carbolic acid, which she drank the previous Monday evening. The deceased, in consequence of being charged with a petty theft, obtained two-pennyworth of carbolic acid from Mr. Crofts, chemist, of 323 High Street, Chatham, on that evening. According to the medical evidence, she had taken about 3 oz. of acid, and was dying when medical assistance arrived. A verdict was returned that deceased committed suicide while in a state of insanity, brought on by worry.

COD-LIVER OIL IN RUSSIA.—It is stated in the Russian press that, in consequence of representations made by certain native traders, the Ministry of Finance has under consideration the question of the desirability of increasing the rate of duty on cod-liver oil imported into Russia to 3 roubles gold (9*s.* 6*d.*) per pound of 36 lbs. It is proposed at the same time to establish a chemical laboratory at Archangel, or at some other place in the north of Russia, for analysing cod-liver oil before it is supplied to chemists for sale throughout the Russian Empire. It is owing to the fact that cod-liver oil is sold in a highly-adulterated state that it has been decided to adopt the latter measure.

DEATH OF A CHILD FROM VITRIOL-DRINKING.—An inquest was held at Over Stowey on Thursday of last week on the body of Ernest Saunders, aged 2 years, son of James Saunders, carter. The father of the deceased placed a medicine-bottle containing some oil of vitriol on a box, and temporarily quitted the room, forgetting previously to replace it. In a few minutes afterwards he heard screams proceeding from the deceased, who had drunk a very small quantity of the oil of vitriol. Dr. Evans, who was called in, administered an antidote, but the child fell into a state of collapse, and died on the following evening from inflammation of the bowels. The jury returned a verdict that the deceased was poisoned by accidentally taking oil of vitriol.

MERCHANDISE MARKS COMMITTEE REPORT.—The report of the Merchandise Marks Committee declares that the Act has been beneficial in diminishing the importation of falsely-marked goods, and that the Customs Department has administered the Act with great fairness. In regard to the alleged inconvenience to shippers through the examination of goods in transit, the Committee are of opinion that any diminution in imports since 1888 is not due to the operation

of the Act, but to such causes as the recent dock strikes and foreign subsidies. The Committee are opposed to the compulsory marking of all goods and the indication of origin, on the ground that it would interfere with trade. As to articles of consumption, such as rum, &c., alleged to be largely imported in an adulterated form, it is proposed to amend the Act so that the Customs entry may be used in lieu of a trade description.

ALLEGED ATTEMPT TO POISON BY A SURGEON.—At the Mansion House, on July 28, George Phelan, 39, a surgeon, was charged on remand with administering laudanum to Charles William Oldham, with intent to endanger his life. The complainant and the defendant, on the night of Saturday week, were drinking together at the Barley Mow Tavern, in Salisbury Square, when the defendant leaned over the counter and, as was alleged, dropped some laudanum into a glass of ale, of which Oldham afterwards partook. A bottle of laudanum was found on the defendant, who was in a muddled condition, and who explained that he had intended to drink the dose himself, he being accustomed to the use of narcotics. Mr. Alderman Phillips said he believed the defendant had no malicious intent, and he should discharge him, but he trusted it would be a lesson to him to be careful in the administration of drugs, even to himself.

A CHEMIST'S SHOP BURNT OUT.—Early on Sunday morning policeman 435N was passing the shop of John Page & Co., homœopathic chemists, 1 Theberton Street, Islington, when he found it well alight, and flames issuing from the basement. The neighbouring firemen were summoned, and soon got to work; but before the flames could be extinguished the whole of the contents of the house and shop were destroyed. No person was in the house at the time of the outbreak, Mr. Page and family having gone to Brighton; and at the time of the occurrence no one knew where to write or telegraph to the proprietor, so that for some time he was ignorant of the disaster that had occurred. The estimated damage is 600*l.* How the fire originated is not exactly known. The broken windows and shutters laid bare to passers-by on Sunday the large bust of Dr. Guest, and over the shop-front was left the fascia, "Phosphonium, the Vital Tonic," and "Established 1855."

FATAL USE OF NARCOTICS.—An inquest was held on July 28, at Bowdon, Cheshire, on the body of Mr. John Sudlow, solicitor, Cross Street, Manchester. On Thursday evening of last week the deceased was suffering from an attack of bilious diarrhœa. He had a hot bath and went to bed. He was found dead in bed the next morning. Constable Finney produced three bottles, one of which had contained chloral and another laudanum, and the latter bottle bore no label. The deceased suffered from a weak heart, and in the opinion of the doctor he had died from narcotic poisoning. Judging from the cork the deceased had evidently carried the bottle of laudanum about with him. Mr. T. W. Townson, chemist, Bowdon, deposed to the deceased having taken chloral for sleeplessness, and he asked witness to increase the dose on one occasion, but he declined to do so. He did not get the laudanum at his shop, but told them he used it for toothache. A verdict "that deceased died from an overdose of chloral, and that such death was due to misadventure," was returned.

BEECHAM'S ADVERTISEMENTS AT LAKE WINDERMERE.—On Tuesday, July 15, a large board displaying an advertisement of "Beecham's Pills" was set up on the shore of Bowness Bay, Windermere. During the night it was pulled down, and two days later another similar advertisement took its place. As there appeared to be a strong feeling in the village against the advertisement, Mr. Beecham's agent sought the services of the police to watch the board, and a constable was put on the duty. About one o'clock in the morning of July 18 he saw two men sail up to the board. One got out of the boat and commenced to saw the posts. P.C. Hastwell tried to capture him, but both escaped. On the following Saturday night or Sunday morning a yacht which had been purchased for the purpose of advertising was boarded, and a hole bored in her, and she sank about eight o'clock in the morning. On Wednesday morning of last week the police watching the board saw, about half-past one, two men row over to the landing, where the board was, and one of them got out of the boat and commenced to hore

the uprights with a brace and bit. P.C. Armstrong succeeded in catching him. The other man then left the boat, and came to his companion's assistance, but he was secured by P.C. Hastwell. The police had a severe struggle before overpowering the men, whose faces were blackened. The men turned out to be Mr. Edward Darcy Curwen and Mr. Alan Delaney Curwen, 25 years and 21 years of age respectively, of Belle Isle, Windermere, and Workington Hall. It is stated that they offered the constables 5*l.* each to settle the case. They were, however, locked up, and in the morning brought before a magistrate, charged with wilful damage, and remanded. Bail was granted in personal securities of 50*l.* each. A committee of the inhabitants has been formed, and the secretary has written to Mr. Beecham asking him to have the obnoxious advertisements removed. On Tuesday, July 29, Messrs. E. D. and A. D. Curwen appeared at the Windermere Petty Sessions, and after hearing the statements of Mr. Squarey, who represented Messrs. Beecham, and the apology made on behalf of the defendants by Mr. Musgrave, the magistrates imposed a fine of 40*s.* and costs upon each of them.

JOURNALISTIC VISITORS TO BEECHAM'S.—The members of the Liverpool district of the Institute of Journalists held their quarterly meeting at St. Helens last Saturday, and one feature of the programme provided was a visit to the pill manufactory of Mr. Thomas Beecham. The block of buildings, covering an area of 1,600 square yards, are in the Queen Anne style of architecture, with a fine tower rising 150 feet from the ground, and were erected at a cost of 30,000*l.* The party were received by Mr. Jos. Beecham, son of Mr. Thomas Beecham, and Mr. Charles Rowed, manager. They were taken on a tour of inspection, and among the many wonderful sights and explanations afforded was the making-up room, where 9,000,000 pills are made each working day; the counting-room, where a machine, patented lately by Mr. Rowed, will automatically count for, and fill 3,000 dozen boxes a day; the labelling and packing rooms for home and foreign trade. Four tons of pills, ready for sale, are usually kept in stock, and 30,000*l.* is yearly paid for medicine-stamp duty. The journalists were also taken over the newspaper-rack room, where advertisements in almost every newspaper and periodical in the kingdom are checked by a regular staff; the miscellaneous advertising room, in which the extent and variety of Mr. Beecham's advertising system is fully shown; and the engine-rooms, in which there is a twenty-horse power engine, with dynamo for supplying the whole of the works with electric light, a smaller one for supplying the offices when the works are closed, and a twelve-horse power gas-engine for driving the machinery. The furnishing and general style of the interior is of a very high-class order, and the employes, in their clean white suits and caps, seem to be the personification of industry and happiness. At the close of the inspection the visitors were entertained to luncheon, and Mr. Beecham's health was duly toasted. Mr. Beecham, in his reply, said his connection with the Press had been a very long and varied one, and he could say, without egotism, that he was the largest advertiser in the United Kingdom. Last year, he could tell them, the firm had spent in advertising a little over 95,000*l.*, and out of that about 84,000*l.* went to the Press. His father, his manager, and himself were all of opinion that newspaper advertising was of more value to them than any other system which they had tried.

IRELAND.

NOCTURNAL PHARMACY and midnight dispensing are the most recent departures of Messrs. Kiloh & Co., chemists, Cork.

The employes of Messrs. Thwaites & Co., chemists, Dublin, enjoyed last week a trip to the famous Glen of the Downs, county Wicklow.

THE ABOLITION OF PRIVATE ARRANGEMENTS IN BANKRUPTCY, so far as it relates to the publication of details of compounding debtors, will, it is expected, take place in Ireland the end of this month, the Bill merely awaiting the royal assent.

TRADE STATISTICS.—By the annual statistics just issued of the port of Belfast, it is seen that the present year's export of medicinal and mineral waters is 2,887 tons, against 2,174 tons for the corresponding period of 1889, the increase being over 700 tons.

DRUG CONTRACT.—Tenders for a year's supply of drugs, medicines, and surgical appliances are invited by the Poor Law Guardians at Ennis, who request that applications by post may reach them on August 6. They also state that medicines containing methylated spirit will be refused, at the contractor's loss.

BREAKING A CARBOY.—On Thursday, while a man named McMullen, an employe of Messrs. Kiloh & Co., pharmaceutical chemists, Cork, was emptying a carboy of nitric acid, the receptacle burst, cutting and burning him severely. He was taken to the South Infirmary, where it was found necessary to detain him.

POOR DRUGS.—Reporting to the County Antrim Grand Jury on the provisions of the Food and Drugs Act, Mr. John F. Hodges, F.C.S., certified as to the examination of 88 samples of suspected articles, including cream of tartar, citrate of magnesia, and a number of general drug sundries, all of which were free from adulteration, though in many cases of inferior quality.

FIVE GUINEAS FOR A TOOTH.—Edward Barrett, a farmer, sued Leopold Henry Robinson, of the American Dental Association, at the Cork Assizes, for 250*l.* damages for the alleged neglect and unskilful manner in which plaintiff had been treated by one of the defendant's servants. The jury, after hearing the evidence, awarded him 5*l.* 5*s.* It appeared from the evidence that the farmer first went to "Sequah" to get a molar extracted, but the caravan operator smashed the tooth. Afterwards he went to the Association, where one of the assistants operated, extracting a sound wisdom-tooth. For the defence, it was stated that the removal of the wisdom-tooth was necessary, and that the plaintiff was so informed.

AUCTION AT CORK.—On Friday the interest in the business of Messrs. F. W. Bogan & Co., family chemists and druggists, Patrick Street, was put up for execution sale by the sheriff. The principal of the firm had been for a long time engaged at Messrs. Summers', of this city, and started business on his own account just two years ago. The judgment on which the place was sold was taken out by Mr. Bogan's sister—a Mrs. Maria Henderson—the amount due being 600*l.* The sale was attended by most of the local chemists, and the bidding was fairly remunerative. The first thing put up was the goodwill and interest of the premises, which carried a half-year's back rent and rates, and upon which the reserve price of 60*l.* was fixed; however, as the bidding for it did not exceed 50*l.*, Dr. Roche, Grand Parade, was declared the purchaser at the latter amount. The rent of the premises is 120*l.* a year, and the portion of the lease which is still unexpired is fourteen years. The fixtures were also knocked down to the last purchaser for 80*l.*, and the bottles fetched a fair price. The remainder of the stock, which went in small lots, was bought up by the various members of the trade. It is stated that the sale realised but half the amount of the judgment. Dr. Roche intends to open the premises in a short time, as they are more centrally situated than those he occupies at present on the Grand Parade.

SCOTLAND. EDINBURGH.

RAISING THE DOSES.—A few weeks ago we referred to the prescription by an Edinburgh physician of large doses of salicylic acid and its salts. Another is prescribing solution of strychnine in 10-minim doses three times a day. A case has come under our notice in which 25 minims of dilute hydrocyanic acid were administered to a gentleman in two doses of 15 and 10 minims, with an interval of fifteen minutes between them. The patient was suffering from severe gastric disturbance consequent on excessive indulgence in alcoholic liquors. Both doses were retained, and the effect was beneficial. The maximum pharmacopœial dose of these two remedies is rarely exceeded, and not commonly reached, by prescribers.

THE PRICES OF PATENTS.—There is still some grumbling by retailers in regard to the combination of the wholesale houses to raise the price of patents, and some evidences have leaked out that the members of the combination begin to see that they have overdone it. It has frequently been a source of wonder to us that wholesalers do not adopt a system of ready cash for those who desire it, and so lessen the expense of clerking and stationery and the consumption of time. At present there is no advantage to anyone paying cash to a wholesale house. The buyer's messenger has to wait while an elaborate invoice is written out; the seller's clerk occupies his time in writing the invoice, and uses up some stationery in the process. Why could not the messenger have the prices marked opposite the items in his order, pay the money to the warehouseman, and the thing is done quite as well for practical purposes as in the wasteful way. Retailers transact business in this way every day.

GLASGOW.

J. POYNTER & SONS (LIMITED)—The action brought by Miss Rebecca Edgar against certain members of this firm of chemical manufacturers for reduction of memorandum and articles of association has been heard in the Court of Session before Lord McLaren, and a settlement come to by arrangement. Miss Edgar objected to certain persons managing the affairs of the firm receiving shares in it, and turning it into a limited company. Under the terms of the agreement the defenders, Alexander Pattison and Robert Blyth, assign their shares without consideration to Miss Edgar, and the other defenders do the same, while the present directors of the company will resign immediately. Miss Edgar agrees to enter into contracts of service with the defenders Neil Leitch and Alexander Steel, and, in addition to wages, they will receive a share of the dividends declared and paid corresponding to 180 shares each. George Bruce, another defender, who is about to leave the company's service, is to receive 500%. Each party will pay their own expenses.

SHOP HOURS.

SINCE the beginning of June the chemists in Arbroath have shut their shops on Wednesday afternoons from 2 o'clock till 6, opening from 6 o'clock till 8. The other shopkeepers in town have been in the enjoyment of a half-holiday for nearly a quarter of a century.

SALFORD.—The shopkeepers of the Pendleton district of Salford, in public meeting assembled, have unanimously adopted a resolution in favour of the half-holiday movement. Immediately after the resolution had been so adopted, however, it appeared that so far as the chemists and druggists of the district are concerned there was a little "rift within the lute." Mr. Jeans, it was announced, had written to say that while heartily sympathising with the half-holiday movement, he was compelled from the peculiar exigencies of his connection to keep open for dispensing purposes; therefore he would be compelled to keep two out of his twelve assistants at business every week. He would, however, pull down his shop blinds and discourage business as far as he could on the holiday. Mr. Gill rose and said, on behalf of himself and Mr. Hamer, that after the letter that had been read from Mr. Jeans, they must withdraw their names from the movement. They gave their hands a holiday, but could not be expected to close when Mr. Jeans had his premises open. The chairman tried his best to get Mr. Gill and Mr. Hamer to reconsider their decision, but Mr. Hamer said Mr. Jeans' closing was no closing at all, and they could not afford to close in the knowledge that their rivals were open. He wanted to act straightforwardly. He was not imputing anything against Mr. Jeans, hut, while he was heartily in accord with the movement, he could not now pledge his word to close his shop for half a day. Mr. Knight (another chemist): Why not close half a day, and never mind Mr. Jeans? He would agree to that. The chairman said he thought the matter would right itself in time, and with this remark the subject dropped for the present.

THE PRESIDENT'S CAMPAIGN.

MR. CARTEIGHE AND A FEW OF HIS COLLEAGUES VISIT EXETER AND PLYMOUTH. AT EXETER THE MEETING RESOLVES ITSELF INTO A COMMITTEE, AND AT PLYMOUTH THERE ARE FESTIVITIES AND A GOOD DISCUSSION.

EXETER.

ON Tuesday evening a deputation from the Pharmaceutical Society had a conference with chemists and druggists at the Clarence Hotel, Exeter. Mr. Henry Gadd, of Exeter, was voted to the chair, and there were also present: Messrs. J. Hustin Lec (local secretary), E. Lemmon, P. S. Rowsell, Harris, W. H. Bulley, F. G. Fouraker, T. C. Milton, David Reid, Tom W. Robson, and W. F. Sanders (Exeter), W. Jackson (Crediton), R. Chessall and H. B. Penherthy (Sidmouth), S. Thornton and W. H. Griffith (Exmouth), John J. Freemeer (Barnstaple), W. T. Quick (Lymport), C. E. Evans (Moretonhampstead), J. Bartlet (Heavitree), E. H. Dyer (Honiton), James Newlyn (Torquay), G. J. Cncliffe (Dunlock), Seth Harry (Okhampton), William Mannder (Teignmouth), Joseph B. Harris (South Molton), and Frederick Ellis (Topsham). The deputation consisted of the President (Mr. Michael Carteighe), the Vice-president (Mr. Bottle), and Mr. C. B. Allen.

The CHAIRMAN, in opening, said there were three things that would probably come under discussion: 1st, what the Pharmaceutical Society had done for them; 2nd, what the Society had not done for them; and 3rd, what the Society should do for them. If every registered chemist and druggist were to become a member of the Pharmaceutical Society, the Society would present one united front, and they would be far more likely to secure legislation which would be beneficial to their interests than they could at present, when they had the sorrowful fact to chronicle that a great number of chemists were outside the Society. They trusted that a new Pharmacy Act might be passed, which would be of benefit to them in the line in which they were engaged. He then called upon Mr. Carteighe to address the meeting.

MR. CARTEIGHE asked, in the first place, to be allowed, on behalf of his colleagues and himself, to thank them for this conference. He preferred to regard it as a conference rather than as a formal meeting. As members of the Council of the Society in London they had certain responsible duties to perform for the trade at large. Those duties they endeavoured to discharge to the best of their ability—in fact, to the best of any man's ability who had to work for a body of men without personal knowledge of such body. They came there to hear criticisms, almost abuse if they liked, in order to have an opportunity of correcting any misapprehensions, because he knew, whether in Exeter or any other city, chemists and druggists would not willingly abuse the Pharmaceutical Society when they knew what were its powers and duties, and when they knew that the officers had done their duty to the best of the powers they had to wield. They knew it was a very common thing to hear it said, "What has the Pharmaceutical Society done for the trade?" Let them, then, in the first place, consider what the Society had done for the trade. Some people said it had done nothing. He was there in the spirit of the founders of the Society to make friends, not to criticise or carp at the want of enthusiasm, want of energy, or what he was in the habit of calling want of backbone among their friends in the trade. He was sorry to have to make that preface; but that was all he had to say on the point. He would rather look forward and see whether it was worth while to consider any suggestion for removing that condition of lethargy and inactive corporate existence. (Hear, hear.) By corporate existence he meant one great corporate body capable of doing good. Perhaps the answer to the question of "What has the Pharmaceutical Society done for the trade?" was best made in the statement of the fact that a number of men occupying good positions in the world associated themselves together to form the Society. He thought they would all admit that the founders could not get any pecuniary benefit out of the Society. They were anxious to found a corporation that should produce good results and good fruits for those who followed after them.

AMONG THE MEN WHO FOUNDED THE SOCIETY

was William Allen. He mentioned him first, although Jacob Bell was the first ardent organiser and mover in the scheme. He was a man of science respected by all mankind; a member of the Society of Friends, yet respected by members of every religious persuasion in the kingdom, honoured by the friendship of kings, and honoured by the Duke of Kent, and became a personal friend of him in regard to certain philanthropic measures. And William Allen was one who, moreover, had the privilege and pleasure of nursing our present Queen on his knee. This man—a man of considerable importance in his own country, and a man of very great weight in various parts of the world—was willing to become first President, and hold office for two years. This showed that the object of those who associated themselves together was a good one in the broadest sense of the word. In 1841 the Society was founded, and in the following year it obtained a charter. From this point Mr. Carteighe proceeded to tell over again the story of Jacob Bell and the 1852 Act, how that Act did not meet the requirements of the case, and how the 1868 Act was emasculated and finally carried. Incidentally he spoke of the share which the United Society of Chemists and Druggists had in the matter, the effect of which was that pharmacy had been put back a century. He proceeded to say that it was not then realised that the Pharmaceutical Society was working in the interests of the trade and not merely in the interests of its own special members or associates. He was not there as a special pleader for the Pharmaceutical Society, but he wished them to understand that what they did as a society could not be of benefit to its members without being at the same time to the benefit of the trade at large. If they would not join, he was not there to chide or abuse them, but he hoped to be able to show that, if they wished the Society to be a real power, they would best obtain their end by becoming members.

The President next considered the powers of the 1868 Act, speaking of the position of corporations under it, and the influence of a number of judicial decisions which have been arrived at since it passed. Amongst these decisions was one in which it had been pointed out that

PATENT MEDICINES OUGHT TO BE LABELLED POISON.

It had been pointed out that it was possible, and even probable, that if the law was carefully thought and fought out by competent men on either side, it might be possible to be held that after all the defects in the Act of 1868 a preparation of morphia was still a preparation of morphia and liable to all the conditions imposed by the Act, even though it was called somebody's elixir. (Laughter). He was not sure that the public was not disgusted with the indiscriminate sale of poisons, and he knew that the medical profession as a whole was disgusted with the facility with which poisons, or so-called patent medicines, were sold to the public without any restriction whatever. Since 1868 the number of patent medicines had increased enormously. Just in proportion as the Pharmaceutical Council had carried out their duties under the Pharmacy Act had the Act been broken by the indiscriminate sale of poisons with a patent-stamp put upon them, and a label stating that they were good for the belly-ache, &c. (Laughter.) If the public once realised this position, it would be disposed to go with the Council. However, to be successful they must be very careful; and it would never do to be unsuccessful, because if they failed they would practically get the judges saying that somebody else besides the registered chemists and druggists could sell a package labelled "poison." He did not want that to occur. He considered that the label was nothing without intelligence on the part of the person who handed the poisons over the counter. The public did not want two classes of persons licensed to sell labelled poisons. (Hear, hear.) Those present might not see the whole of this in the same light as he did; but he would ask them to put their confidence in the Council, whether they belonged to the Society or not, for the Council had their interests at heart. With regard to what they ought to do in the future, he admitted that the so-called stores, or companies, more or less bogus, were very objectionable, and he briefly related how they are formed. The Pharmaceutical Society had been appealed to to put a stop to such companies, and they had done their best, but he was afraid they must accept the condition of things as at

present, and he did not think they would get a Legislature in the future which would say no corporation must dispense poisons. They would have a difficulty not only in getting such a Bill passed, but what he feared was that they would not get members of either House of Parliament to actually introduce any Bill printed on these lines. Because the Irish Pharmaceutical Society—and

THE IRISH COULD DO ANYTHING

in these days in social matters—(laughter)—they could get votes of money for railways, and for irrigation, and all the rest of it; and so, if it was only said that the Irish pharmacists wanted looking after, members of Parliament would listen to almost anything about them—but even the Irish had failed on this point. And not only had they failed, but they had gone so far as to legalise their position. In recent legislation the Irish pharmacists, with greater facilities than those in England, and with a smaller number of vested interests to deal with, had absolutely failed in that way. They had drafted a Bill which practically meant the abolition of this form of trading, and neither in one House nor the other could they get a member to introduce it. This applied not only to members but to Government. In going to Parliament on any question, they must have the assent of Government. What the Government may give he proceeded to unfold; and that, in brief, would be the restriction of the dispensing of prescriptions to medical men. Following that they might get a monopoly in the sale of British Pharmacopœia preparations; and Mr. Carteighe spoke at considerable length regarding how this might be brought about. It should be realised by the trade, he continued, that the society could not do anything in Parliament unless it spoke for the pharmacists and everybody like them. Members of the trade who were not members of the Society were very fond of saying "What has the Pharmaceutical Society done for us?" They wrote in this way to the Press, and signed themselves "Outsiders." Was not that a most illogical position? He (the President) received heaps of letters from friends, couched in the kindest terms, saying, "If you will only do this and that, I will join the Society." He wanted it rather to be, if the chemists and druggists would only come into his fold, and follow the Society's Council; if they would only all join the Society, then the President for the time being could go to the Houses of Parliament, and not only ask for, but almost demand, that which he was not now in a position to request. (Applause.) Therefore, if the chemists and druggists wanted better times, the onus rested on themselves. They need not ask what the Society had done, for he had already told them; and if they asked what the Society could do for them in the future, he would say it rested upon those who did not belong to the Society to say. (Applause.) Upon them rested the responsibility whether in the next year or two their position would be maintained or improved. He had come there to ask them to come in by their hundreds and thousands. He did not want their money. He was, of course, obliged to ask them for their subscriptions, in order that they might be in the Society; but he did not want their money, but their support.

Mr. LEMMON asked whether it was the wish of the meeting that the reporters should publish all that took place. He fancied there might be some things that it was not desirable to put in the papers. He did not wish the members of the Press to withdraw, but if they remained they might have a hint as to what ought and what ought not to be published.

On the suggestion of the President,

THE MEETING RESOLVED ITSELF INTO A COMMITTEE.

The PRESIDENT, in reply to a question, said he was afraid they could not admit managers as eligible for the Minor examination. The Government had been pressing the Society for orders to stop Modified examinations altogether. At the present moment, the officers of the Privy Council would like to pass a new Act abolishing them. It was only fair for him to remind them that persons who had managed a business successfully for years ought, with a little care and reading, to find very little difficulty in passing the Minor examination. The Vice-President had been in Edinburgh presiding over examinations for the past two weeks, and he would bear him out when he said that the position of a practical man in an examination was one

of difficulty as compared with that of a theoretical man. A man who had managed a business practically ought with a little intelligence to be able to get through the theoretical examination; and a man who had successfully managed a business for some years must necessarily be intelligent. If such a man could not by care and attention acquire such knowledge as would enable him to pass the examination, he ought not to be registered. In his (the President's) opinion, and in that of the Privy Council, such a man did not possess the requisite skill and knowledge necessary for carrying on the business.

Mr. LAKE asked a question as to the attention paid by the Society to dispensing, and the President said dispensing was the application of science to a definite art. They could not dispense without a knowledge of chemistry or of physics—that was to say, they could do it, but only under the rule of thumb. There was no doubt the examination would be divided into two parts before very long. In the Bill of the Society of last year, and in previous Bills, it was proposed so to divide the examination. What they wanted to do was to examine a young man at 19 or 20 years of age in the elementary, and then at 21 in the practical part of dispensing.

Mr. BOTTLE (the Vice-President), upon being called upon to address the meeting, said he had arrived at the conclusion, as an old supporter of the Society, that if anything was to be done for the chemists and druggists, it must be done by the Society. Mr. Lake had remarked that he would like to see a fellowship for the Society. His (Mr. Bottle's) advice was, "Stick to the pharmaceutical chemist." (Applause.) The public were now beginning to recognise that the pharmaceutical chemist was something more than a chemist and druggist; and, if they went in for a fellowship and placed that before the position of the pharmaceutical chemist, his impression was that in the next generation the pharmaceutical chemist would be looked upon as holding a higher position than the fellow of the Society.

Votes of thanks concluded the proceedings.

PLYMOUTH.

Continuing their journey, the deputation reached Plymouth on Wednesday, in time to join the chemists' excursion in the Sound, and thereafter the conference was held in the Athenæum Hall, whereat Mr. A. P. Balkwill presided. The attendance was a fairly large and representative one, and included Messrs. T. C. Sloggett, F. Codd, J. M. White, J. G. Netting, Breeze, P. A. Kelly, R. F. Roper, Jas. Cocks, Rendle, Park, Barnes, F. W. Hunt (hon. local sec.), Balkwill, Starkey, &c.

The CHAIRMAN, having alluded to the high compliment paid them in having the honour of a visit from the President, Vice-President, and other members of the Pharmaceutical Council, and the pleasure they had had in giving them a hearty welcome, said there were some who were not in full sympathy with the Society. There was nothing like opposition, however, to keep matters right, and he should be glad to receive any suggestions from the chemists present which would enable the work to be done better in future than in the past.

Mr. CARTEIGHE, who was heartily received, said they were there that day principally to call their attention to the important fact that, if further powers were required for the chemists and druggists of to-day—and a large number said they were—they were only to be obtained by their own efforts. The Pharmaceutical Society was the only recognised body with powers especially granted to it by the State to carry on certain functions, and it was the only authority through which application to Parliament for legislation affecting chemists and druggists or the sale of poisons could be made; but it was impossible to approach Parliament at present and say that they represented all those who were registered as chemists and druggists. As a matter of fact, he believed that they only represented about two-fifths. They could not, in a sense, promote legislation in pharmaceutical matters without benefiting the whole trade; but they could not benefit anybody without further powers over and above what they now had. If asked what the Society had done for the trade, he might reply that it had done many things; but as to what it might do in future, he would say that it could do nothing unless it had the support of the whole profession.

The other members of the deputation spoke briefly, and a slight discussion ensued on a proposal to divide the country into electoral districts for the purpose of electing the Council.

Mr. BOTTLE pointed out that there were members on the Council from all parts of the country, and the President added that there were more country members on the Council than London members.

The CHAIRMAN expressed his regret that Plymouth had been removed from the list of centres for examination, and said he trusted that it would be restored to its former position. Some centres had been abolished because of there being some doubt as to the *bonâ fide* nature of the examinations, and if that was the case in Plymouth he hoped that it would be made known. Messrs. Rendle and Roper endorsed the chairman's remarks.

Mr. ALLEN also pointed out that there was a great blank between Exeter and Truro, the present local centres.

Mr. DAVEY advocated a lower subscription to the Society, and said it would be advantageous to have two scales. He also criticised the *Pharmaceutical Journal*, which did not, he said, sufficiently attend to their trade interests. They were obliged to buy another journal for that.

The CHAIRMAN also said the *Journal* might be made more interesting to them.

Mr. PARK said they got other things besides the *Journal* for their guinea, and he considered they had a fair value for their subscription.

Mr. HUNT said the library of the Society was not used as much as it might be.

Mr. NETTING said the trade interest in the *Journal* was nil, and for half the guinea subscription they could get THE CHEMIST AND DRUGGIST, a proper trade journal. The *Journal* was too scientific. He asked, with regard to selling poisons, if they would be subject to prosecution for what was done by an unqualified assistant who was left behind when they went for a holiday, for instance.

Mr. BREEZE asked if the Wheeldon case, recently decided before Justices Hawkins and Pollock was to be regarded as a test-case. Was there likely to be an appeal?

The PRESIDENT: No; that is now the law.

Mr. ROPER asked as to the position of members employing unqualified assistants in branch businesses.

The CHAIRMAN said they had at Redruth not only unqualified assistants but unqualified proprietors.

Mr. CODD expressed the opinion that all prosecutions for selling poisons by unqualified assistants should be undertaken by the London Society, and not by local members of the trade.

The questions of so-called drug stores, kept by unqualified men, the sale of patent medicines containing poisons, the tax on patent medicines, the dispensing of medicines by apprentices, dispensing by wholesale men to medical practitioners, and the mode of conducting the examinations were briefly discussed, one member with regard to the last-named subject complaining of the impoliteness of the examiners, which, he said, tended to confuse the candidates.

The PRESIDENT of the Society replied at length on the whole discussion. He said that many of the questions put showed that the members had not read the reports in the *Journal* regularly. No slight had been intended to Plymouth by its being removed from the list of centres; and as to the electoral districts, he believed that the present system of electing members of the Council—by allowing all members in all parts of the country to vote for the fourteen—to be the best. He did not believe that by lowering the subscription they would get more members. They would do that rather by making the objects and work of the Society better known. As to the Wheeldon case, he said the decision given in that was now the law of the land; and as to a man going on a holiday, he must take the consequences if he absented himself from his shop. The question of selling poisonous patent medicines would, he believed, shortly be brought before the law-courts. In conclusion, he asked the trade to support the Society, as the only means of obtaining much-needed legislation.

Votes of thanks terminated the proceedings.

In the evening most of the members of the Conference dined together, with the deputation as their guests.

THE IRISH PHARMACY BILL.

A COMMITTEE OF THE HOUSE OF LORDS DISCUSS IT AND MAKE A NUMBER OF IMPORTANT AMENDMENTS.

THE Pharmacy Act (Ireland), 1875, Amendment Bill was before the House of Lords' Standing Committee on General Bills on Friday and Tuesday last, the Earl of KIMBERLEY presiding.

ON FRIDAY,

Lord ERNE made a statement to the committee before the amendments were considered. He said the crux of the Bill was the examination. It was contended by the promoters that all chemists and druggists in business since 1875 should be registered without examination, but the Pharmaceutical Society urged that they should be examined. The promoters considered it would be a great hardship on men who had entered business since 1875 to be called upon to undergo an examination, and they maintained that it was the duty of the Pharmaceutical Society, under the principal Act, to have registered all the traders who entered business since the passing of the principal Act. As the Society had allowed these men to carry on business for fifteen years without interference, their having done so was *prima-facie* proof that they were competent to sell poisonous drugs. The promoters further pointed out that no accidents had occurred through the fault of the men in vending poisons. At the same time, he observed that on the second reading of the Bill a very strong opinion was expressed that an examination was very necessary, and the Government, who had considered the matter carefully, were also of opinion that an examination of a modified character was necessary. He, therefore, proposed to ask the assent of the committee to a clause subjecting chemists and druggists who had entered business since 1875 to an examination of a modified character, and he suggested that this examination should be conducted by some independent body. There had been a great deal of friction between the chemists and druggists on the one hand, and the Pharmaceutical Society on the other. The chemists and druggists conceived that the Society had played rather a destructive part, and they were afraid that if the Society were entrusted to carry out the examination, they would make it so stiff that very few of those concerned would be able to pass. It was, therefore, proposed that the appointment of the body to conduct the examination should rest with the Lord-Lieutenant, and the clause to carry out this examination would follow clause 6 in the Bill as printed.

The Marquis of WATERFORD having proposed to strike out clause 4,

Earl CADOGAN said he thought the committee would agree that it was an advantage to have heard the statement of Lord ERNE. He thought he was entitled to say that the important point to be discussed was that of examination, and as he understood his noble friend was willing to accept the amendments standing in the name of the Marquis of Waterford, he thought it would be well to come to the consideration of clause 6. It was not a Government Bill, and he appeared there as *amicus curiæ* to facilitate a compromise.

Clause 4 was postponed.

The Marquis of WATERFORD intimated that he disagreed with nearly all that had been said by Lord ERNE.

The committee agreed to postpone clause 5.

On clause 6, Lord ERNE said he accepted the amendments of the Marquis of Waterford with one exception. Under the proposed re-arrangement, which had only been arrived at in the last half-hour, the clause would apply only to chemists who had been in business before 1875.

The Marquis of WATERFORD moved to amend the first part of the clause so that it should read as follows: "Every chemist and druggist, or chemist or druggist, who was practising as such in Ireland as a principal on January 1, 1839, and styling himself as such," &c. The words, "and styling himself as such," were inserted in the Bill of 1838 by the late Lord Milltown, and they were very carefully considered in the committee. He simply asked that the alteration of the law should apply only to chemists and druggists styling themselves as such at the passing of this Act this amendment would have very great effect.

Lord ERNE pointed out that the clause would affect only

chemists who had been in business before 1875, and this would be a very limited class. A great many of these men had never called themselves chemists and druggists, but simply sold drapery, drugs, &c. If the committee cut these men out, that class would be wiped out altogether.

The Earl of LIMERICK said that under the Bill of 1838, which was passed by a committee of their Lordships' House, a distinction was made between chemists and druggists passed before the principal Act of 1875 and those passed afterwards. By clause 5 of the Bill of 1838 it was provided that every chemist or druggist who was practising in Ireland should be entitled to be registered as a druggist.

The Duke of ABERCORN hoped the amendment would be withdrawn, because the number of persons affected was very small.

The Earl of CAMPERDOWN reminded the committee that if they struck out the words, "1st day of January, 1839," every person in practice in Ireland would be entitled to be registered under the Act.

The amendment was withdrawn, and the words, "at the passing of the principal Act," were substituted. A consequential amendment was agreed to, and, as altered, the clause ran as follows:

Every chemist and druggist, or chemist or druggist, who was practising as such in Ireland as a principal at the passing of the principal Act, or who has practised as such as a principal during a period of not less than five years at any time previous to the passing of the principal Act, shall be entitled to be registered as a chemist and druggist under this Act on complying with the following provisions.

Sub-sections 1, 2, and 3 were passed, and in place of sub-section 4, which was struck out, the following was agreed to:

Notwithstanding the provisions of section 31 of the principal Act, no person shall be entitled to keep open shop for selling, retailing, or mixing of poisons by reason that he was a chemist and druggist practising as such in Ireland on his own account at the time of the passing of the principal Act, unless he shall be registered as a chemist and druggist under this Act.

Lord ERNE moved the following as the examination clause:

Every chemist and druggist, or chemist or druggist, who has gone into business as a principal after the passing of the principal Act, and before the passing of this Act, shall be entitled to be registered as a chemist and druggist on complying with the following conditions:

(1) He shall, on or before the 1st day of June, 1891, make application in writing to the Registrar to be registered under the provisions of this Act.

(2) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule B of this Act, or to the like effect.

(3) He shall be examined with respect to his knowledge of reading and writing English, elementary arithmetic, chemicals, and the appearance of the poisons in common use, and shall obtain from the examiner, or examiners, appointed by the Lord-Lieutenant of Ireland to hold such examination a certificate of having satisfactorily passed the same.

(4) The Lord-Lieutenant shall appoint examiners to conduct the examinations prescribed by this section for the applicants, and shall fix the fees to be paid to such examiners, which fees shall be paid to the Pharmaceutical Society, and the examinations shall be held at Dublin and such other places as the Lord-Lieutenant shall consider necessary.

The Earl of CAMPERDOWN proposed that the consideration of the clause be adjourned, but on a division this motion was negatived and the clause agreed to.

ON TUESDAY,

when the Earl of Kimberley again presided,

The Marquis of WATERFORD moved the insertion of a new clause:

Provided that it shall be lawful for the Council to require from any such applicant such evidence as they may think fit of the truth of the statements made in the statutory declaration so made by him, and to require such other confirmatory evidence as they shall think sufficient.

He shall pay to the treasurer of the Pharmaceutical Society on presenting himself for such examination a fee of two guineas, and a further fee of two guineas on being registered. Provided always that if he shall fail to satisfy the examiners, he may present himself for subsequent examination by paying examiners' fees.

Provided always that every person who went into business as a chemist and druggist, and has been styling himself such as a principal between

the passing of the principal Act and prior to the 1st day of January, 1889, and has complied with the above provisions, and passed the examination, shall be permitted to retain the title of chemist and druggist.

He said that this clause was necessitated by clause 6, which the committee adopted at the previous sitting. Its first paragraph required that the Council might require evidence as to the truth made in an applicant's statutory declaration; it arranged for the payment of fees, and it allowed chemists and druggists under certain circumstances to retain that title. They did not wish to take away the title from those who now enjoyed it; but they thought it would be better for druggists to be called registered druggists, and not chemists and druggists. This clause would allow existing chemists and druggists to be registered as such.

Lord ERNE said there was no objection whatever to the first proviso, but he thought it would better come in as a proviso to the preceding clause. As to the second paragraph, he would submit that it could not be entertained at this stage, as it was in practical conflict with a clause already passed, leaving to the Lord Lieutenant to fix the fees to be paid.

The Marquis of WATERFORD: That is the fees to the examiners, but not the fees paid by the chemist to be examined.

Lord ERNE thought the fees were really the same, for the applicant paid the fees to the Pharmaceutical Society, and the Society paid the examiners. If there were any doubt on this matter he would see that it was made clear on the report stage.

The CHAIRMAN: I think that the clause we last passed would carry out the matter as it stands.

The first paragraph of the proposed clause was agreed to after the words "provided that" had been omitted from the beginning of the clause.

The Marquis of WATERFORD then moved the second paragraph, but the Chairman ruled it out of order, as being covered by a previous clause.

Lord ERNE then asked the Marquis of Waterford to postpone for a short time the third paragraph, so that the committee might first settle the question of registered druggists. This was agreed to; but almost immediately afterwards Lord ERNE said he would accept this paragraph, and

The committee then accepted the third paragraph, after omitting these words: "Provided always that."

The first and third paragraphs were then added to the Bill as a separate paragraph.

Clause 7, "Certain other persons entitled to be registered," was next considered; and, on the motion of Lord ERNE, the first part of it was left out, as follows:

Every person who shall have gone into business as a chemist and druggist, or chemist or druggist, as a principal after the first day of January, 1889; or who shall duly have completed a term of service as apprentice of not less than four years to a person or persons who shall have become, or who, had he or they survived or continued in business, would have been entitled to become, a registered chemist and druggist under this Act, or to be a pharmaceutical chemist, shall be entitled to be registered as a chemist and druggist under this Act on complying with the following provisions:

The following was then, on the motion of the same noble lord, substituted, after slight amendments by the Marquis of Waterford, the most important being the insertion of these words after "four years"—"To a pharmaceutical chemist or licentiate apothecary or":

Every person who shall duly have completed, or shall duly complete, a term of service as apprentice or assistant of not less than four years to a pharmaceutical chemist or licentiate apothecary, or a person or persons who shall have become, or who, had he or they survived or continued in business, would have been entitled to become, a registered chemist and druggist or registered druggist under this Act, shall be entitled to be registered as a registered druggist under this Act on complying with the following provisions.

The conditions attached to the clause were next considered, with the result that in the second the words in italics were omitted on the motion of the Marquis of Waterford:—

(1) He shall make application in writing to the Registrar to be registered under the provisions of this Act.

(2) Such application shall be accompanied by a statutory declaration of the applicant in the form set out in Schedule C, or to the

like effect with, in the case of assistants or apprentices, an additional declaration in the form set out in Schedule C, or to the like effect.

The third provision contained "examination in," amongst other things, "the appearance of the various drugs," and the Earl of MEATH moved the substitution of the word "nature" for "appearance."

Lord ERNE asked for time for the consideration of this amendment, and it was postponed until the report stage.

Lord MEATH next moved the insertion of the words "poisons and antidotes," as he thought it most important that chemists should know something about these as well as other drugs.

Again he was asked to postpone this amendment, Lord ERNE remarking that these persons were really not doctors; and Lord MEATH agreed to do this.

The third provision was finally agreed upon in the following form:

He shall be examined with respect to his knowledge of English orthography and composition, arithmetic, the weights and measures of the British Pharmacopœia, the appearance of the various drugs and chemicals, and the usual tests for poisons in general use, and shall obtain from the examiners appointed by the Council to hold such examination a certificate of having satisfactorily passed the same.

The CHAIRMAN then asked if it was intended that the examination should be different from what it had hitherto been.

Lord ERNE said it was a different examination.

The Duke of ABERCORN: It will ensure that the men will be better qualified for administering these drugs.

The Marquis of WATERFORD said the noble lord was labouring under a mistake as to this being a stiffer examination. That rested entirely with the examiners. The new provision was almost identical with the one which now obtains.

Lord ERNE suggested that the word "poisonous" should be inserted before "chemicals."

The Marquis of WATERFORD thought it would be a mistake to so limit this part of the provision. For instance, an applicant might be examined in Epsom salts. They were chemicals, but not poisonous chemicals. (Laughter.)

Lord ERNE did not press his suggestion.

The last provision was: "He shall pay to the treasurer of the Society, on presenting himself for such examination, a fee of two guineas, and a further fee of one guinea on being registered."

The Marquis of WATERFORD said it was impossible for the Pharmaceutical Society to conduct the examination at these fees. If they were going to take away all the funds from the Society, and at the same time gave the Society fresh work, he did not think they were doing a fair thing. He moved to insert "two guineas" instead of "one guinea" as the fee for registration.

Lord ERNE thought this second fee was sufficient at a guinea; originally it was half a guinea, and a guinea was agreed upon in the other House as a compromise.

The Marquis of WATERFORD said the original clause was an annual payment of half a guinea. He did not think the two guineas was a very large charge.

The committee then divided, and carried the amendment by 8 to 5.

The clause went on to provide that an applicant who failed might "present himself for a second examination without further payment within twelve months," but, on the motion of the Marquis of Waterford, this was amended by allowing an applicant to present himself for "subsequent examinations on paying the examination fees."

On the motion of the Marquis of WATERFORD, the following paragraph was left out of the clause:

A person who shall have duly completed a term of apprenticeship as aforesaid (commenced before the passing of this Act) to a person or persons who shall have become, or who, had he or they survived or continued to carry on business, would have been entitled to become, a registered chemist and druggist under this Act, shall be entitled to make application and to present himself for examination and to be registered under this section.

The rest of the clause required satisfactory evidence that the applicant had completed a term of apprenticeship which, if uncompleted a year after the passing of this Act, must be completed with a registered chemist and druggist under the Act. These last words were, on the motion of the Marquis

of Waterford, altered to read, "completed with a pharmaceutical chemist, or licentiate apothecary, or chemist and druggist, or registered druggist under this Act."

As amended, the clause was agreed to.

The eighth clause provided that examinations under the Act should take place at Dublin, Belfast, Cork, and Limerick.

After further discussion Limerick was omitted from the places named, and the clause as thus amended was agreed to.

Verbal amendments were made in several subsequent clauses. These included two important amendments, affecting those who may under clause 9 be examined and registered as chemists and druggists. Amendments of clause 9 have effected a change of the title to "registered druggist" simply, and amendments on clause 11 will give the title "associate druggist," and not "associate of the Pharmaceutical Society," to those chemists and druggists who are elected associates.

It was also resolved that words be added to the clause providing for the appointment of some other person to act in the absence of the president and vice-president.

An amendment was introduced in clause 13 to the effect that the Council should contain not more than seven associate druggists.

The Marquis of WATERFORD proposed to add at the end of the clause, "Provided also that none but pharmaceutical chemists shall be eligible for the offices of president and vice-president respectively."

Lord ERNE thought that such a proposal would cast an unmerited slur on the associate druggists, and he hoped the amendment would not be pressed.

The amendment was withdrawn and the clause agreed to in its amended form.

Clauses 14 and 15 were passed with verbal amendments.

The words of clause 16—"Shop for sale of poisons or compounding medical prescriptions to be personally managed by owner or qualified assistant"—was agreed to, but throughout this and subsequent clauses "mixing" was substituted for "compounding."

In this and other clauses a penalty "not exceeding 5*l*." was stipulated for infringement of the Act. When the first penalty was reached,

The Marquis of WATERFORD moved to make the penalty in all cases 5*l*.

The CHAIRMAN expressed a strong opposition against this amendment, for nothing was more undesirable than an absolute penalty. It had been abandoned in all recent Acts of Parliament, and he thought it necessary to leave the amount of a penalty in each case to the discretion of the judicial authority.

The Marquis of WATERFORD said the amendment was taken from the original Act.

The CHAIRMAN said that was very likely, but minimum penalties were inconvenient and unwise.

The amendment was then withdrawn.

On the motion of the Marquis of WATERFORD the following new clause was inserted:

The Council may cause examinations to be held at such times and in such manner as may be prescribed by them from time to time for the purpose of examining assistants to pharmaceutical chemists, and such assistants as shall pass such examination shall be competent to transact the business of a licentiate of the Pharmaceutical Society in his temporary absence, but shall not be entitled to conduct or manage a business or to keep open shop on their own account.

The other clauses in the Bill were agreed to with verbal amendments.

Clause 4, which had been postponed, was also agreed to. Clause 5, "register of chemists and druggists," was also passed, after the alteration in regard to registered druggists had been made. The committee also omitted the following proviso: "Provided also that nothing in this Act contained shall interfere with the business of chemists or druggists whose rights were reserved by section 31 of the principal Act."

The schedules were amended to bring them into conformity with the amended Bill.

The Bill was then ordered to be reported to the House, the Chairman remarking that it would be necessary to reprint it in order to fully understand the effect of all the amendments.

BURROUGHS, WELLCOME & CO.
FRENCH PHARMACEUTICAL NEWS

(From our Paris Correspondent)

THE SOCIETY OF MEDICAL PSYCHOLOGY has issued a list of subjects for the 1891 prize essay competition. 80*l*. is offered for the Aubarel Prize on "Madness amongst Aged People," while 8*l*. will be paid respectively for the Esquirol Prize on "Mental Pathology" and the Belhomme Prize on "Powers of Vision of Idiots." The essays should reach the Society's secretary by the end of the present year.

A SERIOUS EXPLOSION occurred last Sunday in a druggist's shop at Rodez. An apprentice went to the cellar for a supply of petroleum, and allowed his light to come in contact with the liquid. A tremendous explosion followed, which blew out the front of the shop and set fire to the house. The poor lad was badly hurt, and now lies at the hospital in a critical condition. The damages by fire and explosion are estimated at 2,000*l*.

THE EXAMINATION-HALL of the Ecole de Médecine was well filled a few days since, principally by a female audience, on the occasion of the presentation of diplomas of "Doctor in Medicine" to four young ladies. The examining board, comprising Professors Dieulafoy, Delone, Panas, Farnier, &c., warmly complimented the ladies, Mmes. Rouindji, Frenkel, and Vinaver and Mlle. Mendelssohn, on their success. The latter especially passed her examination very brilliantly. She is sister to the practitioner of the same name.

IMPORTANT TRADE-MARK CASE.—Mr. Robert Artus, acting on behalf of the Chesebrough Manufacturing Company, New York, of which he is managing director, has brought an action against M. Agnel, perfumer, Avenue de l'Opéra, Paris, for an alleged fraudulent imitation of a trade-mark. Heavy damages are asked for. The company claims the proprietorship of a trade-mark consisting for the most important part in the word "Vaseline" as applied to certain products. The statement of claim seeks to prove that the defendant has knowingly infringed this mark. The case is before the Ninth Correctional Chamber of the Seine.

THE INTERNATIONAL EXHIBITION OF ARTS AND SCIENCES as applied to industry was declared open, with some show of ceremony, by the Minister of Commerce a week ago; the arrangements, however, remain in an exceedingly backward condition, more than half the galleries being empty. In the pharmaceutical section the Vin Bravais, Blanchard's pepsin, and M. Chaumel de Planchat's specialities are friends that figured last year on the Champ de Mars, but they represent badly this important part of French industry. Scarcely anything English is to be seen about the place, though we are promised a very attractive show by the Tower Tea Company.

MONTPELLIER v. MARSEILLES.—The municipal council of Montpellier has been in a state of ferment for some time past on account of a project for the creation of a Faculty of Medicine in the comparatively neighbouring town of Marseilles. Things came to a climax a week since by the resignation of the council, and for a time the business of the town was at a standstill; even weddings had to be postponed through the absence of a mayor. Dr. Chaplain, Director of the Marseilles School of Pharmacy, has been interviewed on the subject, and states that only as a matter of sentiment, resulting from an existence of six centuries, has Montpellier any possible claim for a medical school. From a theoretical point he acknowledges that the ancient university town can hold its own with any; but, having only a population of 50,000, against Marseilles with 400,000, it cannot offer the same field for study to medical students as the latter town. Besides which, from its important position as a port, the hospitals of Marseilles frequently have cases of Oriental diseases and epidemics of great interest to the student. M. Chaplain thinks, also, that the aspiring medico of Montpellier is too much in the position of the young man whose interview THE CHEMIST AND DRUGGIST published a fortnight since—that of studying his subjects in the hospital before examination.

BRITISH MEDICAL ASSOCIATION.

IN spite of the temporary rebuff which the Executive of this Association got from its members a year ago, the annual meeting this year has not been behind its successors. London having declined to extend a hearty welcome, Birmingham came forward with something like enthusiasm, so that when the meeting commenced on Tuesday past record had been beaten to this extent—that the profession in the city and its neighbourhood were entertaining nearly 1,000 of their brethren as their guests. Never before, we understand, has the Association been so well billeted, and this we may take as an augury of better times to come. The business of the meeting actually began on Tuesday morning at 11.30, in the lecture theatre of the Midland Institute, when Mr. C. G. Wheelhouse, F.R.C.S., of Leeds, resigned the chair on behalf of his successor, Mr. Willoughby F. Wade, B.A., M.B., a well-known Birmingham physician. Preliminary compliments over,

THE ANNUAL REPORT

was read. This was satisfactory, and it recalled the fact that the Association has been in Birmingham before—viz., in 1834, 1857, and 1872. Since the first of these years the Association has seen many a change, and has gone on increasing enormously in influence, as well as numerically. Now there are 13,360 names on the books—an increase of 500 nearly since last year, the schism notwithstanding. The revenue for the year was 30,000*l.*, and the expenditure left a surplus of 3,333*l.*, which has been added to the invested funds, and so bringing them up to 23,860*l.* The reports of committees were afterwards submitted and approved, and some other constitutional business having been transacted, the members adjourned until 4 o'clock, when the Archbishop of Canterbury gave them a sermon in the parish church of St. Martin's.

THE PRESIDENT'S ADDRESS

was delivered at the Midland Institute in the evening at 8.30. The subject of the address was "Pre-technical Education of Medical Men," Dr. Wade confining himself to preliminary education and general science education, more especially of those students who took such a diploma as that of the conjoint board of the Royal Colleges of Physicians and Surgeons. And in contrasting these with men who were fortunate in taking an arts degree, he said, it was self-evident that if two men, equal as regards abilities and industry, studied, the one for five years, and the other for seven, the net result must be in favour of the latter. The problem was how to secure for the poor man the greatest possible amount of that knowledge which now fell to the share of the rich; and what section of that knowledge was the more important. After examining the time at the disposal of a medical student who proposes to take his diploma at the age of 21, and the reasons of the General Medical Council for desiring to postpone the age to 22, the President pointed out that the Council, at its last session, determined that the position was not satisfactory, and made certain recommendations for its reform, which were freely referred to in this journal at the time. It was more especially noticeable that the Council proposed that a student shall only be required to devote a year to chemistry and the physical sciences, and the President considered that this is by far too little, when it happens that the object of such study is to enable the student to understand what his teacher means when he speaks, for example, of a limb acting as a lever of the first order; to obtain an intelligent acquaintance with the principles of instruments used, as for example, a thermometer; to understand chemical references, and so forth. But there is another object, more important than the whole of these put together.

INSTRUCTION BECOMES EDUCATION

in direct proportion to the time spent in conveying it. The system to follow must be line upon line, precept upon precept, here a little and there a little. The twelvemonth now to be allotted to science may serve to cram in a fair share of instruction in facts and phenomena, but it will be impossible to do more. It will be impossible to really enable one to

grasp the great principles which underlie these sciences. Even of the knowledge acquired, how much will cling? Scientific education—the acquisition of the faculty or habit of intuitively and invariably regarding any subject, any fact, any proposition, in a strict, precise, and logical manner, scientific methods, scientific modes of thought and habits of mind, the scientific sense—where will all that be? Early compulsory scientific education will be in the future, as it is in the present, non-existent. In two years a good deal might be done to remedy this. But two years cannot be allotted to preliminary science unless there is

COMPULSORY PRELIMINARY EDUCATION.

That brought them to the third question—Why should this not end at fifteen years of age? As the result of inquiries which he had himself made into the educational *status* of classes other than those from which medical students are drawn, and especially the youths attending Birmingham Board schools, the President found that the Birmingham Board-school boy, at the average age of 13.3 years, could pass half the medical preliminary examination and several other things as well. He therefore argued that, in the remaining four years up to seventeen the boy could acquire the remaining subjects; but he deprecated spending so much time over Latin. He put it down at two years, and said that the uses to which a medical man did actually put his knowledge of Latin were—first, he wrote in his prescriptions the Latin names of drugs instead of their English or Anglicised ones; second, he wrote in Latin his instructions to the dispenser for compounding the drugs so ordered; and, third, he wrote in Latin his instructions to the patient as to the quantities in, and the times at which, medicines were to be taken, or as to the manner applications were to be used. He submitted that the necessity for this had already crumbled, as the English names are all given, as well as the Latin, in the British Pharmacopœia. After quoting the opinion of Mr. Gladstone in support of his views, Dr. Wade proceeded to suggest that Latin should be made one of the optional subjects; and he thought that the General Medical Council should appoint a select committee to investigate the whole question of preliminary education, so as to enable them to judge what it was most profitable to teach, and how the teaching could best be given. At the conclusion of the address Dr. Wade was awarded a cordial vote of thanks, and the meeting adjourned.

THE ANNUAL MUSEUM.

One of the features of this meeting which always interests the drug trade, and especially the wholesale part thereof, is the museum or exhibition. This gives those who are alive to the importance of appealing to medical men at first hand an excellent chance for business. The business does not at first sight appear to be of a profitable character, sales being generally few, and the distribution of samples rather prolific. Indeed, it may be questioned if the sample system is not a little overdone. As long as it is confined to goods which exhibitors manufacture or sell, it is perfectly legitimate; but when the goods are not convenient for pocketing, and as a substitute the visitor gets a nice pocket-wallet or something of that sort, one is apt to think that money is being thrown away. It is right to add that many of the visitors are partly responsible for the perpetuation of the system. They are not all doctors; some are wives, sisters, and daughters, who in their innocence imagine that everything is a sample, are not slow to pocket, and often ask for things they want but do not see. Well, there were some nice things at Birmingham which would please them, and many a tasting-stall for refreshment of a mild character.

The exhibits were arranged in the museum of the Queen's College. This is a building with two galleries, fairly well lighted, and it may be convenient for anatomical and pathological specimens, but is not a success as a place for a commercial exhibition. On the ground floor surgical exhibits were arranged, and on the first floor and in the galleries were "Foods and Drugs." Sections were also devoted to anatomical, pathological, and physiological specimens.

THE DRUG EXHIBITS

appeared to be as important this year as they have been on previous occasions. We refer to them as briefly as possible

as they were set down in the catalogue, arranging them, however, in groups, according to the nature of the exhibits. ALLEN & HANBURY were placed in a good position, and they took full advantage of it by exhibiting a very complete selection of their well-known specialities. These were arranged in a charming manner, with due regard to effect. Thus, on glass shelves were specimens of pharmaceutical preparations—liquid extracts, syrups, tinctures, granular preparations and the like—while smaller and more portable articles and packed goods were displayed on the table. Bynol was amongst the prominent articles, and although it is not altogether novel, it deserves mention here on account of its palatability and excellence as a malt and oil preparation. All the other combinations of bynin were shown, together with a nice selection of recent remedies, and the firm's specialities in coated pills, tabellæ, ophthalmic discs, lozenges, capsules, &c. Another section of the exhibit was devoted to infants' food. BLACKWELL, HAYES & Co., a Birmingham wholesale firm, had a small exhibit in one of the galleries, which we had no opportunity of inspecting closely.

A large space on the first floor was occupied by BURROUGHS, WELLCOME & Co., whereon they displayed the cream of the comprehensive price-list which they presented our subscribers with last week. It seemed a formidable exhibit for a reporter to attack in anything short of a whole day; but the half-dozen gentlemen, including the two partners, who were in attendance, made the task pleasant. One could not help noticing at the outset the weather-beaten medicine-chest which was Stanley's companion in Darkest Africa. There are eight like it scattered over the route which the plucky American and his followers travelled. He got nine from the firm, well plenished with useful compressed medicines, and, as the contents were used up, the chests helped to mark the march of civilisation. What better proof could there be of the utility of the Congo Chest than this travel-stained relic? The bottles are intact, though empty, and even the especially-compiled medicine-book survives, though sadly stained and ear-marked by frequent usage. Naturally the relic was one of the most severely-inspected objects in the museum, and naturally also the extensive show of tabloids created attention. There are several new combinations offered in this department—compound medicines in tabloid form increasing in popularity with the profession. One of these is the hydrastia compound (hydrastia, gr. $\frac{1}{4}$; ergotin, gr. $\frac{1}{2}$; and cannabin tannate, gr. $\frac{1}{12}$) prescribed by Dr. McNaughten Jones. The firm were giving away neat boxes of samples of this line of goods, and "correspondence cases" within which lurked a greater variety of their manufactures. We may mention, by the way, that the sale of saccharine tabloids is largely on the increase. A new form of suppository was exhibited. It is shaped exactly like an indiarubber teat, this form having the advantage of being retained when pushed into the rectum. The mention of a teat reminds us that the Thermo-safeguard feeding-bottle had a place in the exhibit. Of lanoline and its preparations there was a great variety, ichthyol-lanoline soap, used in certain affections of the skin, being one of the new things, and gurjun ointment another. Lanoline soap, perfected to the neutral stage, is one of the latest things in this department. Of pinol there was almost a surfeit, the pretty oval label, showing the highest point of the Matterhorn through the Alpine snow-line, being characteristic of all. And here we may say that the refreshing odour of pinol perfume abounded in the corner. The firm also made a good display of manufactures for which they are agents, including Bishop's effervescing preparations, Fairchild's digestive products, and a number of synthetic compounds. Amongst the latter was salol, which has lately been "booming," and is like to displace iodoform for many purposes, as, for instance, in gonorrhoeal bougies. We were shown a nice tooth-wash, "Salodent," of which salol is the principal ingredient. Besides the things we have mentioned—and they are not a tithe of what was shown—there was a good selection of medicine-cases, hypodermic-cases, antidote and surgeons' bags, &c., in the exhibit.

THOMAS CHRISTY & Co., of Lime Street, E.C., appear to be moving with the times in so far as their exhibit is now as much made up of galenical preparations as crude drugs. The latter used to comprise the major part of the exhibit.

On this occasion a small collection of new and rare drugs served as the basis of a rather interesting series of liquid extracts and specialities, which this firm has done much to popularise. The newest drug shown was the seeds of *Tephrosia Vogelii* which are used in Africa as an arrow-poison, and are now being tried in Europe as a heart-tonic. Ouabain, another remedy of the same class, was shown in several forms, a standardised liquor being the latest addition. This drug has had considerable success in the treatment of whooping-cough. Other prominent remedies on the stand were salix nigra, and bark and seeds of jambul. Young Mr. Christy made a good showman, and often had quite an imposing audience to hear his dissertations.

CORBYN, STACEY & Co. have always come out strong at the Association meetings, and although their exhibit on this occasion was in many respects similar to what they have had in former years, it had certain new features. For instance, the rapid advance of synthetic research, and its influence upon therapeutics, is responsible for many new remedies, and of these Corbyn, Stacey & Co. had a good show. Of pharmaceutical preparations a liquid extract of cinchona, which mixes clear with distilled water, was one of the most attractive novelties; and there were a number of articles of the bougie class which are rather uncommon. Dr. Scaines Spicer's nasal cylinders are tubelets made of glycerine-gelatin base, medicated as the prescriber may desire. It is obvious that the heart of a bougie is of comparatively little use, so in this instance the heart does not exist, but is replaced, when the cylinder has to be inserted into the nose, by a hollow and flat vulcanite plug which keeps the cylinder in contact with the mucous membrane, and establishes a free passage for respiration. A somewhat similar arrangement is exhibited in Mr. Marmaduke Shield's ear-pellets, which are cocoa butter bougies, with a narrow canal through them. A little holder is supplied with these, which fits into the canal, so that a pellet may be picked up and dropped into the ear with little trouble. A fine specimen of strophanthus exhibited on the table was the means of taking our representative into a conversation with Mr. Stacey, jun., in the course of which Mr. Stacey gave it as the experience of his firm that the use of the drug is decidedly on the increase rather than the decrease.

EVANS, SONS & Co., of Liverpool, had one of the prettiest exhibits in the museum. It was devoted to Montserrat lime-juice and pharmaceutical preparations, and consisted of two elegant carved oak show-stands, made by the firm's cabinet-makers, each of the cases being fitted with highly artistic transparent glass tablets, engraved and illuminated by one of their etchers, who is reported to be one of the smartest artists in this line in the country. These cases, then, are an example of what the firm can do in the shop-fitting line. On the pharmaceutical case, a line of granular effervescing preparations first called attention. These were the first result of a new installation of plant which the firm have put down, and which will enable them to produce 2 tons of this line of goods per day. Coated pills, suppositories, and bougies were also exhibited in great variety, the suppository trade, by the way, being one which is decidedly on the increase. It is not many years ago since there were but a few houses who touched this business, and we know of some who were actually supplied by retail chemists in the country, who thus employed the spare time of apprentices; but increasing demand and the revolution of retail pharmacy have induced such firms as Evans, Sons & Co. to make suppository manufacture a feature, and the result, so far as the appearance of the goods is concerned, cannot be deplored. Another attractive feature of the exhibit was a series of ointments made with fossiline for the 1883 museum, and kept in ordinary pots since then. Now they seem to be not a bit deteriorated—red precipitate, lead iodide, lead acetate, and other ointments which alter so much in composition and appearance in a few months, being quite free from reduction. A series of liquid galenicals was also shown, fluid extracts taking the leading part. This, said Mr. Conroy to our representative, is an increasing trade. Retailers go in for fluid extracts more than ever, and they seem to take the place of concentrated infusions. There were also shown Hawley's medicinal specialities, and of these and Savarasse's capsules specimens were given to medical men. Of the

lime-juice exhibit we need not write; we have reported on many a similar one before, and the fact that the "Montserratt" brand is the standard of its kind has been amply proven in years past.

PHILIP HARRIS & Co., Birmingham, occupied a considerable space in one of the galleries with a composite exhibit comprising chemical and scientific apparatus, surgical instruments, drugs, and pharmaceutical preparations. O. J. HEWLETT & SON, of Charlotte Street, E.C., were in close proximity, but were exceedingly unfortunate in having their very handsome case placed in a position where none could appreciate its beauty. The case was one which ought to have been shown on the floor; but it was placed in the dark, and rather high up. Messrs. Hewlett's exhibit comprised all their well-known compound pharmaceutical specialities with which the trade are familiar, these being shown in tall, cut-glass bottles, with illuminated labels, which added greatly to their attractiveness. In addition to compound mixtures, we noted among the exhibits coated pills and suppositories. HOCKIN, WILSON & Co. were better placed on the first floor, their exhibit consisting largely of minor surgical instruments, amputation-cases, &c., and there was a very complete assortment of patent Belfast linen catheters, and similar instruments, which appeared to be greatly admired by medical men, the flexibility and strength of this peculiar composition being not its least important characteristic. In the patent prostatic catheter one part is flexible and the other rigid, this being considered an advantageous arrangement in certain cases. A handsome walking-stick was shown which, on inspection, was found to be a catheter-holder, the silver knob screwing off and discovering a receptacle for a catheter. The same material of which the catheters are made is also used for making enema-pipes. There were several novel pharmaceutical preparations shown, one of them being a granule of effervescent exalgin, containing four grains in an ounce, the disagreeable flavour of the remedy being disguised with vanilla. Lately this firm have also turned their attention to making non-spirituous preparations of jalap resin, with the result that they exhibit here a liquor which is standardised to contain two grains of the resin in a fluid drachm, also a jalap glycerine for rectal injection, the jalap resin aiding the glycerine materially in inducing healthy action of the bowel. GEORGE E. PERRY exhibited his skin soap in the gallery. This is put forward as a neutral super-fatted soap. READE BROS. & Co., of Wolverhampton, also exhibited a pharmaceutical speciality consisting of malt and hypophosphite biscuits. These are very palatable biscuits containing 75 per cent. of malt and a fair dose of compound hypophosphites in each one. They seem to deserve to be better known than they are. The representatives of W. E. SACKER (of whose death many in the trade will be sorry to hear) exhibit the goods which Mr. Sacker was so long the agent for. W. H. Scheffelin & Co.'s coated pills and granules took up a large part of the space. Sacker's hypodermic solutions and compressed tablets were also prominently shown, and our attention was also called to Gardner's syrup of hydriodic acid, which has the reputation in the States of being one of the most stable preparations of this valuable medicine.

On their own ground it was but natural that SOUTHALL BROS. & BARCLAY should come out in force, and this they did in an imposing exhibit which occupied the centre of the floor. This was divided into six sections, the first comprising drugs and pharmaceutical preparations, which was again divided into six groups, and the other sections were ranged in a similar systematic manner. In the first was a small collection of Indian drugs sent by Mr. David Hooper, quinologist, who was at one time a Southall's man. Several of these were fairly well known. Amongst those that are not was the astringent bark of *Amora rohituka*, which has a good reputation in the treatment of spleen, especially in the Western Peninsula, where it grows very abundantly. The gum-resin of *Balsamodendron Berryi* was another interesting specimen, owing to its very different appearance from the official gum-resin. In every respect the most interesting part of this section were the samples of tinctures purchased from leading London houses to illustrate the great variation in strength which is exhibited by tinctures made according to the British Pharmacopœia. It would take up too much space to give the figures showing the variation in

all cases, but it may be said the variation is so great as to render standardisation necessary. Needless to say, these samples were a set-off to the firm's own standard tinctures. These tinctures are standardised according to the average percentage of active principle in the crude drugs, taking into consideration, however, the degree of exhaustion obtainable by the most approved menstrua. Next in importance to the tinctures in the exhibit were the very interesting specimens illustrating the cod-liver oil industry. A 76-lb. cod, as fine a specimen as Frank Buckland could have wished to see, was placed in the centre in a large case, and in front of it were specimens of Dugong, shark, Japanese cod-liver and many other fish oils, with Southall's own well-known brand, and the constituents of cod-liver oil were also exhibited separately. Surgical dressings and sundries were also included in the exhibit, urine-testing apparatus and cabinets being grouped in the same section. The 4th section was educational, and included Flora Artefacta, which are most natural representations of flowering plants. In section 6 the firm exhibited their table-waters prepared with distilled water. WILCOX & Co., of Oxford Street, W., were well placed in one of the galleries just opposite the door, and here they displayed a good selection of the French and other pharmaceutical specialities for which they are agents in this country.

JAMES WOOLLEY, SONS & Co. had an exceedingly varied exhibit of their manufactures. The case in which these were openly displayed was the same handsome one that they had at Leeds last year. Liquid galenical preparations formed unquestionably the most important part of this exhibit, several very elegant compounds being noticeable. Amongst these was Glycerinum Pepticum Acidum. This is a clear amber-coloured solution possessing the peculiar odour of the peptic secretion, a drachm of it being capable of digesting 1,000 grains of hard-boiled albumen. A very large number of liquors were also shown, all of which were, as far as we could judge, well-made preparations, and very elegant in appearance. One cannot help admiring the enthusiastic persistency with which this firm continues to push the pure alcoholic nitrites, and if pure ethyl nitrite and isobutyl nitrite do not become the favourite remedies with therapeutists, it will not be for the want of proper trying on the part of Messrs. Woolley. We noticed amongst the liquid galenicals a series of concentrated mixtures for dilution with water, and amongst the solids were some very good samples of suppositories and quite brilliant specimens of pearl-coated and other pills, as well as lozenges, pastilles, and several of the more important packed goods, such as sanitary rose-powder, with which the name of this firm is identified. Surgical and scientific instruments were also shown by them on an adjoining space.

WYLEYS & Co., of Coventry, being practically a local firm, were enabled to put themselves strongly in evidence. We cannot be wrong in mentioning in the first place the gelatine oval pills manufactured by this firm. We have spoken about them on former occasions, but again we had the opportunity of assuring ourselves how nicely these are produced. The large selection shown comprised all kinds of medicines, from the pilule of atropine to the 5-grain rhubarb pill. We were particularly struck with Wyley's hypodermic pellet-case. This contains a useful selection of pellets, together with syringe and a small apparatus for preparing the hypodermic solution extemporaneously. This apparatus is very neat, and consists of a small porcelain capsule which fits into a tiny retort-stand, the base of the latter being the spirit-lamp—that is to say, it has a slight depression for taking a small charge of methylated spirit, which when lighted suffices to effect the solution of the pellet. There were other examples of compressed pellets on the stand, as well as a full line of special preparations, effervescent goods, permanent hypodermic injections, orexin gelatine capsules, and several new remedies. We noticed also Photopel, a new photographic developer, invented by Mr. H. W. Jones, chemist to the firm, but of this we hope to speak at a future date.

In the surgical section, H. WARNER & Co.'s manufactures were exhibited, and consisted of sugar-coated pills, compressed goods, and granular preparations; as in former years, the ready solubility of the pills was demonstrated in a simple manner. The exhibit was the most extensive of this class of goods in the museum.

FOODS.

There are many more departments in the museum than the catalogue gave it credit for. "Foods and drugs" is a comprehensive term, but we shall first dispose of foods proper before we notice mineral waters and promiscuous exhibits. The only exhibitors in the cocoa department were Cadbury Bros., whose tasteful exhibit is put down in the catalogue as "Cocoa absolutely pure." This refers to their well-known essence, about which our representative had a short talk with theirs. First he was shown several good specimens of the fruit with slices taken off to show the "berries" in the interior; then came specimens of the "berries" from Asia, Africa and America; next the decorticated "berries," the cake formed from them by powerful hydraulic pressure, which gets rid of the butter. From this cake the essence is made without further addition. Hence the term "absolutely pure." There is difficulty in making a soluble essence, and the difficulty is got over by some manufacturers with the addition of alkali; but not so in the case of Cadbury's, the genuineness and soundness of the "berry" and the thorough removal of the butter being solely relied on. A question was put as to the disposal of the by-products. Much cocoa butter from Cadbury Bros.' works is sold in Mincing Lane, and it is said that it is bought for chocolate manufacturers. Is that so, and why? To that our representative had the reply that the supposition was not groundless. Continental chocolate is often loaded with other powders than cocoa, but these powders do not combine without the addition of cocoa butter. "And the husks?" They go to Ireland to make cheap tea—"miserables," as they are called—for poor people. There is some flavour in the stuff, and although it contains not a trace of theobromine there is plenty of gluten in it, so the drink is really not very miserable. After this our representative took a note of the different manufactured articles, one of them being "cocoa charcoal cremes," the cream, if we may so call it, being a thick paste of charcoal inside a layer of chocolate. They are a palatable confection, which has been proved to be beneficial to dyspeptic patients.

Extracts of meat were present in legion. "BOUILLON FLEET" in the gallery, BRAND & Co. on the first floor, this firm having a wonderful collection of invalids' delicacies, in the shape of essences, soups, broths, jellies, lozenges, and biscuits. THE J. P. BUSH MANUFACTURING COMPANY, of Chicago and New York, who have recently taken premises in London, showed "Bovinine"—a raw beef extract, which their representative said "must go." It is fluid, but as it contains all the albuminous matter of the beef, it solidifies when heated in a test-tube. CARRICK & Co. (LIMITED) showed their peptonoids and other specialities; DENAEYER PEPTONIDS AND EXTRACT OF MEAT COMPANY (LIMITED) also exhibited, their show comprising the peptones which we have recently commented upon, and pepsin and pancreatin, as well as special beef-compounds—one of these, "beef and vegetable extract," being made for Dr. Burney Yeo's treatment of typhoid. The LIQUOR CARNIS Co. (LIMITED) made an impressive *début* with their Caffyn's Liquor Carnis. At their exhibit, in the corner of the first gallery, Mr. Shepperson and his assistants were kept busy explaining the virtues of the liquor, and mixing the cyclist's drink of it and lime-juice with potash-water, which we made public some time ago. Free samples of the liquor done up in neat sage-green boxes were also distributed; but, truth to tell, many of the medical visitors already know the article well, and it seems to be "booming." GEORGE MASON & Co. (LIMITED) were also amongst the meat-extract exhibitors. Malted goods were represented by the "Kepler" preparations, shown by BURROUGHS, WELLCOME, & Co. "Maltine" was also there. So was LEOPOLD HOFF, with his strong wee man (in terra-cotta) and an energetic assistant, who was an adept at composing drinks with the extract. Infants' foods were represented by G. MELLIN (who had several other specialities), and we noticed a brave show of NESTLE'S FOOD.

The Manchester nursemaid who went into a drug shop for milk last week was not so far out after all, for we discovered in the museum milk put up for druggists' sale by DAHL & Co., of the Minorities. A clever demonstrator explained to our representative that this was sterilised milk put up in closed tins—a quart sells for 6d. The way in which it is canned ought to exclude all germs, and, as

sterilised milk is now ordered by medical men, there is no reason why druggists should not sell it as well as a fluid beef. Food without digestion were as "Hamlet" without the Prince of Denmark, so we may conveniently wind up this section with a reference to G. & G. STERN'S Pepsalia, or digestive table-salt, which was one of the features of the meeting. The firm had the testing process in action, similar quantities of egg albumen, with and without Pepsalia, showing that in the former case, the conditions of heat being the same, the albumen is gradually dissolved.

MINERAL WATERS.

On the ground floor THE APOLLINARIS COMPANY exhibited "the queen of table-waters," which our own Queen takes with her whisky; also Friedrichshall and Hungarian bitter-water. At INGRAM & ROYLE'S stand, in the gallery, there was a unique attraction in the shape of a Vichy liqueur digestive. This is a delicately-flavoured liqueur containing the salts of the Vichy water, which materially aid the digestive process, and "correct" the adverse influence of wines on the system. Obviously it may take the place of Vichy water, but the latter is still well to the front, as the exhibit testified. The other waters which Ingram & Royle exhibited were Esculap, Flitwick Chalybeate, Homburg Saline-Chalybeate, Rosbach, and Carlsbad water and its salts.

ANTISEPTICS AND DISINFECTANTS.

The numerically small numbers of exhibitors in this section was made up by the variety of the articles exhibited. It will be convenient, however, to include here exhibitors of antiseptic dressings, which were chiefly shown in the surgical department. First on the catalogue we find JEYES' SANITARY COMPOUNDS COMPANY (LIMITED), whose exhibit was divided into two parts. On the first floor creolin was in evidence. This antiseptic has now taken a firm hold in surgery, and in the antiseptic treatment of skin diseases and other disorders which originate in germ-life. The company has wisely developed the business—creolin itself going a long way for the money—hence specialities in the shape of dressings formed a prominent part of their exhibits, especially in the gallery one, where our representative found curtains of creolin gauze, the quality of the material being proved by the suspension in it of heavy supplies of samples of creolin and lano-creolin. Jeyes' disinfectants were also shown here, but they were by far too numerous for detailed description; suffice it to say they owe their activity to principles such as have made the reputation of creolin. JOHNSTON & JOHNSTON exhibited antiseptic dressings and medicated plasters, and J. F. MACFARLAN & Co., who were Sir Joseph Lister's right-hand men when he started his system, and have kept pace with him since, exhibited a complete collection of Listerian and other antiseptic dressing. The SANITARY WOOD-WOOL COMPANY (LIMITED), had several novelties in their exhibit, one being a wood-wool vaccination-pad to sell at 2d. This pad lasts for about a week, and, being absorbent as well as antiseptic, it keeps the pustules in good condition. Gonorrhœa-bags made of similar material are now replacing the old-fashioned and unsanitary waterproof article. The SANITAS COMPANY (LIMITED) appeared to have every one of their manufactures on exhibition; and, in addition to disinfectants and several soaps charged with "Sanitas," there was an assortment of the surgical antiseptics which are known to surgeons as Kingzett's bactericides. These are combinations of peroxide of hydrogen with antiseptic bodies, so that they possess the property of destroying micro-organisms as well as the effete matter which these organisms produce in their action on the tissues. The manufacture of these bactericides has naturally taken the company into a branch of business which is increasing with them. We refer to the manufacture of plain solution of hydrogen peroxide, samples of which were shown in patent bottles. Although SEABURY & JOHNSON'S name does not occur in the catalogue we found an exhibit of their plasters and antiseptic dressings with hydronaphthol in one of the galleries. A menthol plaster with a diachylon base was one of the novelties in this line. It is a plaster such as this which the Pharmacopœia Committee have resolved to incorporate in the Addendum. There has been some talk

about this resolution, but the fact is that menthol is one of the most popular drugs at present, and the only room for wonder is as to the spreading of the plaster, should the Pharmacopœia authorities give a formula for the mass. Obviously a hot spatula will not be the thing to spread it with, since that would induce the volatilisation of much of the menthol. Seabury & Johnson tell us that they have encountered all the difficulties, and—well, here was the plaster. Of their plasters generally we may place the fact on record that Stanley had a supply of the most useful kinds with him on his expedition. We think we mentioned that before he started, but since then it has been reported that some of Surgeon Parke's notable cures are traceable to the plasters. The newest thing in "court-plaster" is a delicate and extremely flexible silk, which adheres firmly to the skin with very little moisture. As we have already stated, the exhibit included antiseptic dressings; we noticed, too, a peculiar elastic web bandage for varicose veins, which is so woven that it clings to the skin, loose and tight fold remaining so without fear of alteration of pressure.

G. & G. STERN'S exhibits of pumiline essence and its preparations are somewhat difficult to classify, for while they are used by the physician, their antiseptic character has taken them into surgery also. We shall let this note stand here, however, for while our representative was at the gallery exhibit (the firm had another of a similar nature on the first floor) Dr. Ward Cousins gave him a demonstration of how the ear should be cleaned out in cases of otorrhea. "First," said the doctor, "we syringe the ear with, say, this pumiline emulsion; then we take some of this pumiline absorbent wool, and run it round the end of the ear forceps layer by layer, making a pellet of it. This dries it out, and we use another pellet, until the last is so dry that it leaves a thin layer of boracic acid with pumiline on the mucous membrane." This was the demonstration, and it has left us little space for the exhibits. Messrs. Stern have gradually adapted pumiline to many therapeutic purposes, so that we have it in several forms which were not at first anticipated. The latest is the emulsion which Dr. Ward Cousins spoke of. We cannot call it anything else than a milk, and we understand that it remains so indefinitely. This and several other forms, such as ointment and plaster, were exhibited. A few of the most imposing exhibits of dressings were in the surgical-instrument section—the LIVERPOOL LINT COMPANY, for instance, who showed plain lints, cottons, and bandages, as well as those that are medicated. One of the best things we have seen in this department for some time is a patent protected lint, which is a lint with the texture part covered by a waterproof material. This should solve the problem of which side of lint goes next the skin, for here the fluffy side is bare. The lint is sent out in useful roll-cases, which keep it always ready. There were other useful articles in the exhibit, and practically every requisite for surgical dressings, amidst which a case of chest-protectors had a modest place. JOHN RICHARDSON & Co. were also placed in this section; but their exhibit was of a composite nature. Lints, cotton-wools, bandages, and Gamgee tissue were exhibited by ROBINSON & SONS, of Chesterfield, who make these absorbent and antiseptic; and of them they had an excellent selection on show.

SURGICAL INSTRUMENTS

were such a bewildering and gruesome show that our representative had not the courage to attack them with sufficient enthusiasm, but he reports that local houses had good rivals in the London representatives. LYNCH & Co.'s exhibit was very extensive, every conceivable knife, forceps, saw and what not being displayed. ARNOLD & Co. had a number of novelties, and in another branch DARTON & Co. were doing good business, especially with clinical thermometers and optical goods. There were a number of book-publishers here—for example, Mr. H. K. Lewis of Gower Street; and Mr. F. A. Davis, of Philadelphia and London, the publisher of that monumental work "Annual of the Universal Medical Sciences." We saw Helbing's "Pharmacological Record" in the hands of many of the members, and we take it that the author was "hovering around."

While the museum was open it was visited by a considerable number of pharmacists, who were even more alive than the medical men to what was new and good.

Pharmaceutical Society of Great Britain.

JULY EXAMINATIONS.

PRELIMINARY.

THE report of the College of Preceptors on the examination held on July 8 shows that 359 candidates had presented themselves, of whom 214 had failed, and the following 145 passed:—

Adams, Albert E., Nottingham	Jones, William Morgan, Rhydyfelin
Akeroyd, Chas. Edward, Alnwick	Keene, Hedley H., Bournemouth
Alanson, John Thomas, Crook	Kemp, Wilfred, Whitstable
Arls, Alfred William, Swanley	Kerr, Archibald, Dumfries
Ashmore, Arthur, Brighton	Kerridge, Alfred Ernest, Luton
Bailey, John Hy., Flamborough	Lane, George, Wymondham
Barnard, George Bartlett, London	Latham, Arthur Wm., Haydock
Barton, Fredk. Keal, Liverpool	Lee, Charles Theodore, Liverpool
Bennett, A. E., Great Torrington	Lennox, James, Edinburgh
Benton, Alfred, Loughborough	Lucas, Wm. T., Northampton
Bishop, Arthur, Leicester	Ludlam, Wm. H., Sheffield
Blackburn, Albert E., Darlington	McBryde, Alexr. H., junr., New
Boothron, John, Glasgow	castle-on-Tyne
Bowland, Arthur, Southport	Mace, Lewis Albert, Wicacombhe
Boyle, Joseph, Nottingham	Macfarlane, Thomas, Glasgow
Bradshaw, Thomas, Boothstown	MacKuzie, John M., Edinburgh
Burnett, John, Pickering	Marie, Louis Xavier, Edinburgh
Campion, Sydney H., Cambridge	Marshall, A. A., Waltham Abbey
Clark, Alexander, Norwood	Marston, Richard W., London
Clarke, Thomas Joseph, Derby	Martin, John, St. Agnes
Clutterhuck, B. R., Cheltenham	Mason, A. O. H. N., Birmingham
Cooper, Burton F. J., London	Mason, Ernest Noel, Bexley Heath
Creswell, Harry G., Bromsgrove	Mason, Henry Gurney, Ryde
Crockart, William, Montrose	Morgan, Harold M., Ullesthorpe
Cumher, Perry, Guernsey	Morley, Charles, Lelant
Curtis, Edgar, Southampton	Morrell, Jobu G., Stockton-on-Tees
Davies, David, Llandilo	Morris, Samuel T., Carnarvon
Davies, David Thos., Portsmouth	Manton, James B., Stamford
Davis, Charles, Riverhead	Newcombe, Thomas, Egremont
Davison, John Lyle, Bidford	Nicol, William, Fording
Dodridge, Wm. J., junr., Woolstone	O'Brien, Frederick, Liverpool
Drummond, Wallace, Hawkhill	Oshorne, Harry E., Spalding
Elliott, George R., Nottingham	Parry, Evan Thomas, Llanarth
Evas, John Richard, Brierley Hill	Peck, Harold R., Cambridge
Evans, Octavius W., Birmingham	Pendlebury, James, Manchester
Farrow, Albert Edward, London	Penny, Edgar G., Wateringbury
Fell, Sidney, Huddersfield	Pickard, Herbert James, Exeter
Field, George, Cambridge	Pickles, Frank, Grantham
Findlay, George, Edinburgh	Pratt, Robert Rowles, Woodstock
Firth, Herbert, New Mills	Prior, James Siddall, Manchester
Fletcher, Richard Jaques, London	Proudfoot, William, Glasgow
Fletcher, Samuel T., Horncastle	Ramage, Thomas R., Edinburgh
Floyd, Charles W. O., Soham	Reid, Alexander, Aberdeen
Forbes, James, Nairn	Robertson, Joseph, Aberdeen
Forrester, Thomas, Edinburgh	Robinson, Charles H., Loftus-in-
Franks, Charles, Leicester	Cleveland
Fyfe, John, Stirling	Rugg, Arthur Vivian, Crewkerne
Gaiger, James Edwin, Winchester	Russell, Joseph Fredk., Leeds
Gartside, Herbert W., Chadderton	Scott, George Baty, Belford Station
Goodall, Frederic C., Oongleton	Sharland, Wm. C., Auckland, N.Z.
Goode, Arthur Fredk., Nuneaton	Sinclair, James P., East Linton
Goodenough, J. M., Somersham	Smalley, John Robert, Preston
Gray, Charles L. H., Old Aberdeen	Smithies, Wm. Henry, Bradford
Greatrex, E. J. McWilliam, Liverpool	Stamp, George Harry, Brigg
	Stearn, Ralph M., Cambridge
	Steel, Robert Atkinson, Keigbley
Harrison, Alfred W., Pendleton	Tapner, Charles Albert H., Bristol
Hawley, Thomas H., Coventry	Thomas, John W., Hebden Bridge
Hay, Roderick, Dingwall	Tims, Edgar Orlando, Leicester
Hendry, Simon, Belfast	Walker, William Henry, Hereford
Hesketh, George F., Huddersfield	Walter, James R., Kirkwall
Hoeken, William M., Liverpool	Warner, Percy Robert, Leicester
Hoffmann, Carl M., North Shields	Waters, James Bowden, Morpeth
Howard, Alfred, Hyde	Waterston, James Albert, Forfar
Hoyle, Fredk. Wm., Leeds	Westerman, Thos. K., Huddersfield
Hubble, William B., Workington	Whitelam, John Herbert, Hull
Hudson, Frank, Ecclestone	Wild, Sydney, New Mills
Huxtable, Zebra Charles, Bristol	Williams, John Veale, Helston
Innes, George, Edinburgh	Williams, Leonard A., Llanelli
James, James Llanvair, Llanelli	Williams, William T., London
Jeaus, Arthur, Cardiff	Willmott, Frank, Cambridge
Jones, Edward Rees, Oswestry	Wilson, Harold Oates, Nottingham
Jones, John Beynon, Llanarth	

Winn, J. E., Bradford, Manchester
Winsor, William Liouel, Clevedon

Wood, Ernest James, Tockwith
Wright, William Bruce, Greenock

THE BOARD OF EXAMINERS FOR SCOTLAND
met at Edinburgh on July 16, 17, 18, 22, 23, 24, and 25.
The following gentlemen were examined and passed:—

MAJOR EXAMINATION.

Lothian, John, Duns

Millar, James Herd, Edinburgh

Tocher, James Fowler, Peterhead

MINOR EXAMINATION.

Bennett, Albert Edward, Leigh
Bethell, Arthur, Bolton
Brown, William H., Edinburgh
Brown, Walter Sims, Calster
Burton, Edmund, Edinburgh
Cardno, Robert Catto, Edinburgh
Carré, James Hilary, Guernsey
Collingwood, Robert, Rochdale
Craven, Walter Joseph, Stafford
Day, Charles Fredk., Montrose
Donald, John Martin, Perth
Dunlop, David, Glasgow
Evans, Josiah, Manchester
Gartside, Fred, Chadderton
Golightly, John Wm., Durham
Gordon, Alexander, Liverpool
Johnson, George H., Manchester
Jones, John Ellis, Edinburgh
Liversidge, Joe Sykes, Edinburgh

Maedonald, Donald E., Wrexham
McNair, Robert Hunter, Leith
Morrison, John McGregor, Edinburgh
Price, Herbert H. G., Edinburgh
Price, Joseph, Liverpool
Porter, Andrew B., Edinburgh
Robinson, William, Manchester
Sanderson, Joseph, Glasgow
Smiles, Robert Smith, Edinburgh
Smith, Robert, Dumbarton
Stark, George Miller, Edinburgh
Swinglehurst, Josiah, Oldham
Thomson, Archibald, Liverpool
Turner, Samuel, Salop
Walker, Frederick, Liverpool
Whitaker, William, Manchester
Wilkie, David T., Liverpool
Wright, George Victor, Edinburgh

MODIFIED EXAMINATION.

Littlewood, Samuel Joseph, Manchester

THE BOARD FOR ENGLAND AND WALES

met in London on July 15, 16, 17, 18, 22, 23, 24, and 25.

MAJOR EXAMINATION.

Twenty-two candidates were examined; 8 failed, and the following 14 passed:—

Brackenbury, Richard H., Bardney
Clark, Alfred Turner S., London
Cranstone, E. H., Hemel Hempstead
Foster, Edgar Denney, Rugby
Franklin, John H., Manchester
Hobson, Edmund, Cheadle
Lord, William Butler, Lancaster

Martin, William M., Redruth
Negus, John H., Northampton
Perks, Alfred, Birmingham
Prince, Roland, Longton
Sherlock, Edward B., St. Helens
Whitbread, Howard, Loughborough
Woodward, Moses M., Nottingham

MINOR EXAMINATION.

Two hundred and twenty-seven candidates were examined; 127 failed, and the following 100 passed:—

Addison, Charles Samuel, Hitchin
Allenby, John Edward, Helmsley
Bard, Cecil Harry, Exeter
Bately, S. B., Great Yarmouth
Bates, William, Spalding
Bishop, Ernest, London
Breeze, Charles, London
Charles, David, Llanelly
Cheers, Samuel, Chester
Coles, Charles N., Horsham
Dalglish, Luther R., Lowestoft
Davies, Herbert, Newtown
Dawson, Athol S., Sleaford
Dickinson, Charles, Llandudno
Dwelly, Hedley E., Maldstone
Edwards, David P., Bishop's Castle
Evans, Daniel A., Llanbrynmaur
Falkinbridge, Fredk., Kennington
Fielding, Clement, Eiland
Gartside, Charles, Oldham
Gazelle, Charles Joseph, London
Gooseman, Henry Charles, Hull
Gribble, Edmund A., Stockwell
Hanham, Arthur S., Portsmouth
Harris, George Robert, Bradford
Hayton, Thomas Irwin, Wigton
Heap, John Henry, Bolton
Heaton, John, Rastrick
Herbert, Sydney R., Cockermouth
Higgs, Andrew Badgery, Bodmin
Hill, Joseph H., Birmingham

Holt, Alfred Henry, Swansea
Holgate, Herbert, Catterick
Hope, Ingham, Hull
Hunt, John Lambert, Chesterfield
Hutton, Thomas Walter, Dudley
Jones, Edward, Portmadoc
Jones, Hugh Kyffin, Mochdre
Kempston, Theodore, Dublin
Kitching, Arthur S., Beckenham
Lane, James, Nottingham
Lawton, Henry S., Birmingham
Lewis, David, Llanrhystyd
Lewis, David Griffith, Cardigan
Lloyd, James Herbert, Leicester
Lloyd, Walter George, Cardiff
Llneraft, William H., Broad Clyst
McFall, John Edwd. W., Liverpool
Mackereth, Charles T., Ulverston
Marshall, George, Spilshy
Miller, Frederick, Strood
Millward, Frederick, Cardiff
Morgan, Richard B., Birmingham
Morris, Edward H., Bedford
Morris, James H., Pembroke Dock
Mould, John Salmon, Louth
Neevon, Horacio John, London
Nicol, Burton Alexander, London
Nosworthy, Allan Percy, Yeovil
Oakley, Thomas James, Newton
Owen, Griffith C., Carmarthen
Oxley, George, London

Pain, Charles Frederick, Dover
Parker, Christian, Bath
Partridge, Charles Henry, Clifton
Pay, Harry Hilder, Margate
Pemberton, Fredk. P., Nottingham
Pickard, Samuel Norman, Ossett
Poole, Thomas B., Sawbridgeworth
Pye, Alexander Gralg, Atherstone
Rayner, John, Uxbridge
Riddle, Thomas Edward, Hexham
Rosowarne, Richard, Falmouth
Rowland, John L., Carnarvon
Sellé, Louis Sherwood, Hull
Sleggs, George Milner, Liverpool
Siina, Harry E., Burton-on-Trent
Smith, Thomas, York
Smith, Walter W., Doncaster
Spencer, John C., Manningham
Stead, William W., Bradford

Sturch, Harry H., Kidderminster
Sturton, Charles Hubert, Loudon
Sumner, George T., Hawkhurst
Sykes, Harry, Uppingham
Tasker, John Henry A., London
Taunton, Edgar, Sittingbourne
Thomas, Alfred Messer, Redruth
Tillman, Ernest Augustus, Truro
Tinker, Henry, Dukinfield
Travis, Henry A., Manchester
Twelves, C. H., Whittington Moor
Wallsgrave, John C. H., Loudon
Walton, Henry Egbert, Idle
Wells, Arthur John, Lincoln
Whitehead, Fredk. N., Morecambe
Whitehouse, John H., Bridgnorth
Williams, A. L., Pembroke Dock
Williams, William, St. Clears
Wilson, William, Nuneaton

MODIFIED EXAMINATION.

Three candidates were examined and passed, viz.:—

Beech, Elliot S., Birkenhead
Cugnoni, Alfred H. D., London

Moore, David George, Manchester

Personalities.

DR. ALEX. EHRENBURG has been appointed technical director of Trommsdorff's chemical works in Erfurt, and will hold the firm's procuration.

MR. JOHN C. HEWLETT, of C. J. Hewlett & Son, wholesale druggists, is proceeding to Berlin to attend the International Medical Congress.

MR. PERCIVAL K. FRIPP, late of Borough High Street, and formerly of Fenchurch Street, E.C., has acquired the business of Messrs. Grindley & Sons, wholesale and retail chemists, of Chester.

WE had a call the other day from Mr. W. J. Evans, who formerly represented Messrs. McKesson & Robbins in London. He is to attend the International Medical Congress on behalf of the firm, and will prolong his stay in Europe for a few months.

MESSRS. ATKINSON & POWELL, chemists and druggists, Townsville, U.S.A., have made arrangements for the dissolution of their partnership. Mr. Atkinson has taken over the business, and Mr. Powell will practise as a dentist in another quarter.

SIR HENRY E. ROSCOE, in a recent address at St. Mary's Hospital, on the advancement of medicine by research, gave his audience a reminiscence of Dumas. "I remember well," said Sir Henry, "one day in Paris the great chemist Dumas talking to me after dinner at his own house, over a cigar, of his career. 'I have,' said he 'seen every phase of life—student, teacher, professor, minister, senator—but no work that I have been called upon to perform has been so satisfactory, or is looked back upon with such pleasure, as that of carrying on original work; and, if I had to live my life over again, I would not relinquish my quiet laboratory pursuits for all the splendour and influence of Court favour, or the turmoil and rewards of political life.'"

THE EAST CARMARTHENSHIRE LIBERAL ASSOCIATION met on Tuesday to select a parliamentary candidate in the place of the late Mr. Pugh. There was a tough tussle between Mr. Gwilym Evans, of Llanelly, and Mr. Abel Thomas, B.A., of London, for the honour. Ultimately Mr. Thomas was selected by 170 votes against 120 given for Mr. Evans. The political creed of both gentlemen appears to be much the same, but Mr. Evans had the advantage over Mr. Thomas of being a fluent speaker of the Welsh language. The friends of Mr. Evans, however, contend that while there should have been representatives of but 8,000 electors present, the voting was in the proportion of 11,000. It is therefore probable that a fresh ballot will be demanded. Should this be refused, there is talk of a Labour candidate being run by those who are dissatisfied with the present decision.

REGISTERED **"SANITAS"** TRADE MARK.
IS THE IDEAL AND MOST RELIABLE
DISINFECTANT,
And is most used in Antiseptic Surgery.

LARGEST SALE IN THE WORLD.

The Trade, in their own interest, should stock all our "SANITAS"
Fluids, Oil, Powder, Soaps, Toilet, and Veterinary Preparations.

KINGZETT'S BACTERICIDES

AND
PATENT PRESERVED PEROXIDE OF HYDROGEN

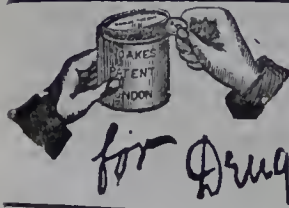
THE SANITAS CO., BETHNAL GREEN, E.

SHOW CARDS, 24×17 or 17×12,
Free to any Address in the United Kingdom.



See First Page, facing inside of front of Cover, in this issue for latest particulars.

UMNEY'S CINCHONA
ERGOT
CASCARA
PRICES CURRENT
ON APPLICATION.
WRIGHT
LAYMAN
& UMNEY.
SOUTHWARK.
LONDON.
FLUID MALT & C^o
EXTRACTS.

 **Noakes' Tins**
for Druggists' use.
Write for Price
List No. 14.
B. NOAKES & CO
Dockley Road,
Bermondsey, London

MEDICAL ELECTRICITY.



EVERY DESCRIPTION OF
Galvanic, Faradic, and Electro-Magnetic
Machines and Electrodes, Galvano-Cautery and
Lighting Instruments.

Lists free. Descriptive Catalogue, 100 illustrations,
32 pages, 4 stamps.

GENT & CO., LEICESTER

IMPORTANT TO CHEMISTS.

NOVEL "COUNTER ADJUNCT"
FOR AUGUST.

SEE PAGE 40.

EVANS, LESCHER & WEBB, LONDON. | EVANS, SONS & CO., LIVERPOOL.

Savaresse's Sandal Wood Oil Capsules are now in White Enamelled Metal Boxes

MOSS'S
CASCARA

EXT. CASCARÆ SAGRADÆ LIQ.—BLAND.
A Bland, Safe, and Certain Laxative.

All our extracts, solid and liquid, may be obtained through
Wholesale Houses, or direct from

JOHN MOSS & COY

Makers of Galenicals and Medicinal Chemicals,
Galen Works, Wilson St., NEW CROSS ROAD, S.E.

CAUTION!

IMITATIONS OF JEYES' CREOLIN GAUZE

Are being offered which
entirely fail to answer the purpose for which
the gauze is used.

These imitations are only half the weight of Jeyes' and are almost
entirely non-absorbent,
and therefore worthless.

Chemists are warned against purchasing any gauze not
bearing the name of

JEYES' SANITARY COMPOUNDS CO. (LIM.),
43 CANNON STREET, LONDON, E.C.

SILICATED CARBON
FILTERS



PATENT SELF-AERATING
MOVEABLE BLOCKS

WORKS, BATTERSEA LONDON. S.W.

"Abandon methods of business which are unsuited to the
times in which we live." THE TIMES, July 23, 1890.

Does this strike you as sound advice? If so, consult our **Crimson Supplement** to THE CHEMIST AND DRUGGIST of July 26. Copy free on receipt of postcard.

Kelcher, Fleischer & Stevenson

EDITORIAL NOTES.

THE IRISH PHARMACY BILL.

TEN days ago the prospects of this Bill were not bright, but at the eleventh hour they have become brilliant, and now two formal stages in the Upper House, and the agreement of the Commons to the amendments made by the Lords Committee, are only between it and complete enactment. The Marquis of Waterford held the Pharmaceutical Society's brief, and succeeded in getting the better part of his five pages of amendments agreed to. Lord Erne, for the chemists and druggists, was also successful in getting

several minor alterations made, and he proved a conciliatory advocate for his side. The Bill is a very different one now to what it was when it left the House of Commons. Several provisions are introduced which hitherto have not been favourably regarded by the representatives of the chemists and druggists, and, instead of being a Bill dealing solely with that class of traders, it promises to become an Act as directly affecting the interests of pharmaceutical chemists. So far as chemists and druggists and their assistants and apprentices are concerned, the Bill at present places them in the following position:—

1. Chemists and druggists who were in business as such before the passing of the principal Act shall be entitled to be registered as "chemists and druggists," and they must register if they are to "keep open shop for the selling, retailing, or mixing of poisons."

2. Chemists and druggists who have gone into business as principals between the passing of the principal Act and now shall be registered on passing an examination, and such of them as may prove that they have used the title "chemist and druggist" will be allowed to retain it; otherwise they will get the title "registered druggist."

3. Assistants and apprentices of four years' standing, on passing the examination originally provided in clause 9, will receive the title "registered druggist," and will be so registered. This applies equally to those who have served with pharmaceutical chemists, licentiate apothecaries, chemists and druggists, and registered druggists.

4. Any one of the new grades who joins the Pharmaceutical Society will be called an "associate druggist."

These show what the new titles are, and how they are to be obtained. It is evident that the Pharmaceutical Society have been working hard, for the alterations represent points which they have been fighting very keenly all along; and their advance has been made possible, we understand, by the other side giving way in order to ensure the success of the Bill this session. This was wise. The examination which those who have gone into business since 1875 will have to pass will be of a modified character, and conducted by examiners specially appointed by the Lord Lieutenant. It should give no trouble to all those who are having practical experience in the every-day trade of the druggist; and it is these really, and not those who merely sell a limited selection of packed drugs, whom it is desirable to place on a proper footing. If there is any opposition to the Bill as amended in the House of Commons, we believe that it will be directed to this portion of it. That, substantially, will mean the wreck of the Bill, and it would be a pity should this now happen. It is, on the whole, a good Bill; the new examination is consistent with the spirit of the existing Act, and it has been drawn up by friends of the chemists and druggists themselves. The Marquis of Waterford's proposal in this direction was much too vague, viz., "such other confirmatory evidence as the Pharmaceutical Council shall think sufficient." The compromise is, therefore, altogether in the interests of the chemists and druggists. The examination as finally agreed upon will comprise a knowledge of English orthography and composition, the weights and measures of the British Pharmacopœia, the appearance of the various drugs and chemicals, and the usual tests for poisons in general use." It is not a perfect examination by any means, but it will suffice to show whether candidates are familiar or not with the nature of the articles they handle. The alteration which is proposed to be made on the title for those who are not now principals need not give rise to opposition, and the refusal of the Pharmaceutical Society to give the designation "Associate of the Pharmaceutical Society" to chemists and druggists, but only "associate

druggist," is a thing which entirely concerns the welfare of the Society. The change cannot do it any good, our experience in Great Britain being that Minor and Modified men join the Pharmaceutical Society mainly for the purpose of calling themselves associates thereof. Few would pay the guineas if they could only call themselves "associate druggists," and the title is not likely to be more palatable in Ireland.

Since the House of Commons abandoned the annual registration fee, the Pharmaceutical Council have argued that the initial fee provided by the Act was too small. The Lords' Committee have, therefore, agreed to an examination fee of two guineas and an additional fee of one guinea for registration. These fees are by no means excessive. The other alterations which have been made on the Bill are of minor importance. Clause 16, which in some respects is the cleverest in the Bill, has been amended so that "compounding" poisons, in the first three lines, is changed to "mixing," it being obvious that the former word sanctioned chemists and druggists to perform operations in the nature of dispensing. The clause is clever in so far as it contains sentences which define the vexed question, Who is the seller? The clause states that "such person or persons lawfully keeping open shop as aforesaid shall, for the purposes of this Act and of the principal Act, be held to be the retailer and compounder of poisons or medical prescriptions as aforesaid therein." This will apply to pharmaceutical chemists and chemists and druggists, for, though the word "compounding" in the former part of the clause has been changed to "mixing," the definition "retailer and compounder of poisons" is retained for both classes. There is no Act of Parliament without inconsistencies, and truly this Pharmacy Bill is no exception. In spite of the safe principle involved in the 16th clause, viz., personal management of the shop by the qualified owner or other registered person, the Lords' Committee agreed to a clause, brought forward by the Pharmaceutical Society, to create an examination for assistants so as to prove their competency to manage shops in the temporary absence of the principal. We comment fully upon this clause in another note, but here we may point out that the clause does not compel a principal to leave such an assistant in charge during his temporary absence, nor is the Pharmaceutical Council compelled to institute the examination. The only reason for the clause that we can discover is that it will provide a supply of cheap assistants with an examination qualification. This is a risky business for the Pharmaceutical Society of Ireland to embark on, and the Council should consider well what the influence upon pharmacy will be by dividing the attention of assistants between a trivial examination and the qualification which will enable them to perform all the functions of their calling.

SUCCESSFUL TRADE JOURNALISM.

LAST week's summer number of THE CHEMIST AND DRUGGIST is the largest weekly issue of our journal which has ever left the press. Many special issues have been published by us since, thirty-one years ago, we made our *début* in the journalistic world, and our bow to the trade with which THE CHEMIST AND DRUGGIST is indissolubly identified. In the words which on that occasion we addressed to our readers we referred to the well-known line gracing the masterpiece of the architect of St. Paul's: *Si monumentum quæris, circumspice*. The quotation is hackneyed, we admit, but we believe we may say with justice, that to him who would inquire what the British drug trade is worth, and what claim it has to rank among this country's great and expand-

ing industries, the serried ranks of our thirty-seven volumes afford the most fitting answer.

When *THE CHEMIST AND DRUGGIST* first appeared, on September 15, 1859, it consisted of sixteen octavo pages of letterpress. The beginning was modest, but the outlook bright, and the conductors set themselves an aim which they believed could not fail to lead to success. Whether their hopes have been fulfilled our Summer Number of 1890 is there to tell. Let us look at that publication for a moment merely from a material point of view, without inquiring how "it came to be, for length and breadth, the thickness which you see." Counting all trade announcements, it contains 396 pages, measuring $10\frac{1}{2}$ inches in length. Supposing the total pages of all the copies of our issue to be joined to one another in a band, they might stretch down to earth from a height of 1,905,750 feet, or quite 1,900 times that of the Eiffel Tower, and equal to sixty-six Mount Everests, or eighty-one Chimborazos, placed one upon the other, an altitude altogether eclipsing the proverbial piling of Pelion upon Ossa.

If all the copies had been piled upon one another, the publisher of this journal might have climbed to the flagstaff of the same Eiffel Tower, and would yet have failed to reach the topmost copy. Spread on the surface of the earth in one strip of 8 inches in width, Stanley, whose achievements afford another popular standard of the gigantic, might have looked upon the first advertisement of Messrs. Allen & Hanburys when emerging with Emin at the shore of Lake Nyanza, but he would not have concluded the eleven thousandth repetition of the Apollinaris announcement upon his arrival at Bagamoyo; and then, of course, he would only have read one half of the matter contained in the journal, the paper being printed on both sides. Laid side by side, the combined pages of our issue would cover a superficial area of nearly four-fifths of the United Kingdom. We do not claim for ourselves the sole credit of the growth this journal. That expansion is the truest sign that *THE CHEMIST AND DRUGGIST* fulfils its claim to be the organ of the British drug trade, and at the same time it marks a fact highly creditable to the intelligence, the love of fair dealing, and the modern instincts of the representative houses of that trade. For if to-day *THE CHEMIST AND DRUGGIST* stands on an eminence as a representative trade organ second to no other in the kingdom, its measure of success is largely owing to the fact that it has never consented to barter for the support of its constituency, nor attempted to draw the support of anyone by specious puffs or "opinions" manufactured to order. It is the curse of trade journalism that a very large proportion of its alleged representatives are either conducted by absolutely incompetent men, or offer an entirely fictitious return for the support which they claim. What modern business man is unfamiliar with the wiles of our "reptile" press, of the journals—unworthy the name—who promise glowing "literary" puffs in return for advertising support, or whose "tariff" is as elastic as the consciences of their conductors. Worthless publications in plenty beset the path of the manufacturer anxious to find a market for his goods. Like the Midianites and the Amalekites of yore, they lie along the valley like grasshoppers for multitude, ready to devour the trader. Few firms are aware at the outset of their career of the absolute worthlessness of many apparently respectable trade journals. They are brought before them to all semblances the mouthpiece of a solid constituency of readers, pretentious in appearance, rather point-device in their accoutrements, and hiding their emptiness under some grandiose title. It is only by experience that traders become aware of the true nature of these scalp-hunters of our industrial centres.

And if *THE CHEMIST AND DRUGGIST* flourishes, if it has attained the period of vigorous manhood with every prospect of increasing success, it is in a very large degree because its constituents have learnt to appreciate its absolute independence, its enterprise, and the strict uniformity of its treatment of all its patrons. The fact that throughout a career of well-nigh a third of a century a large number of our original supporters still remain true to us must reflect credit upon ourselves as well as upon them. *THE CHEMIST AND DRUGGIST* has grown with the trade which it represents, and the modern ideas pervading that trade are brought out strikingly in the pages of our summer number of last week. That publication is certainly as complete a compendium to the requirements of the pharmacist as has ever been issued. From the warehouses of the firms whose goods are made known through it, the most exacting pharmacist could obtain all his manifold requirements. Among the advertisers in that issue are many who, a few years ago, would have spurned as an insult the suggestion that they should ever "go in for publicity," and we have not the smallest doubt that future numbers of this journal shall contain business announcements of scores of others who still cling to the old ways in the vain hope that their old customers will endure perennially, and that trade will continue to flow to them through "some happy, genial influence, coming one knows not how, nor whence, nor whither going."

While these lotos-eaters dream on, thousands of others are borne onward to prosperity on the mighty tide of modern competition. Who that scans the pages of our summer number can fail to be struck with admiration for the ingenuity of the advertisers to the illustration of whose announcements the explorer in the Aruwhimi forest and the telephone lady in the city office alike contribute? From fire insurance to chamois leather, from night lights to the latest surprise in soaps, our pages afford evidence of the alacrity of the caterers for the pharmacist's requirements. The thought and care expended upon many of the announcements which our journal bears from this Metropolis to the uttermost corners of the earth, from the East to Western Ind, are beyond praise. But if we thus rejoice in the confidence and laud the skill of our supporters, we are not unmindful of our duty as journalists to provide a literary kernel worthy of its setting. This alone can secure for a journal an influential circle of readers, and without such a constituency, paying freely for their mental pabulum, a journal is not worth the paper it is printed upon. The support of thousands of subscribers is the reward of our endeavours to present to our readers weekly the completest possible epitome of all events pertaining to pharmacy in its widest sense, and to comment upon those events in the broadest spirit of impartiality and liberality. We believe that we also derive a portion of our success from the fact that our experience has taught us the sources whence to procure the most reliable and quickest news, and that our editorial staff is composed of men who in one branch or another have had a thorough and prolonged insight of the trade of which *THE CHEMIST AND DRUGGIST* is the organ. What better "new journalism" can there be than that which keeps pace with the requirements of a constituency ever growing in numbers and fastidiousness, which causes the products and ideas of a large industry to be made known wherever foot of civilisation is planted, and of which the favours cannot be gotten for gold, neither shall silver be weighed for the price thereof?

A QUALIFICATION FOR ASSISTANTS.

THE initiative taken by the Irish Pharmaceutical Council to graft on to the Pharmacy Bill a clause to ensure the proper qualification of assistants is the first legislative result of Mr. Justice Hawkins's decision in the Wheeldon case. That decision appears to have had a wide-reaching influence. We notice that Canadian druggists have been excited by it, and the fact that one or more decisions have been given on the same lines in Canada has helped to make the new rendering of the law more acutely felt. But the Canadian law differs from the British and Irish in respect of the fact that there is in Canada an examination which qualifies assistants to act as such: so also in regard to apprentices; and while the regulations for these two classes of individuals must have a beneficial influence upon pharmacy, it is notable that only the fully-qualified pharmacist is permitted to have complete charge of the sale of poisons and dispensing of prescriptions, assistants and apprentices only being competent to do so under the immediate supervision of a fully-qualified person. Altogether the Canadian law is, if anything, more strict and clear than ours is, and the prohibiting of the employment of unregistered apprentices and assistants goes far beyond anything which has ever been thought of in this country. It will also be noticed that the present Irish proposal has no parallel in Canadian law. What is desired by the Irish Council is simply "an examination to qualify assistants to transact the business of a licentiate of the Pharmaceutical Society in his temporary absence." This proposal is precisely on all fours with the demand made by some chemists in Great Britain for the reinstitution of the 1852 Act qualification for assistants. Is such qualification desirable or practicable in Great Britain or Ireland? We decidedly answer in the negative, and for these reasons: First, the object aimed at logically precludes the intermediate qualification, since the law has already laid it down that the persons who shall perform certain duties—viz., the sale of poisons in Great Britain, and the sale of poisons and dispensing of medical prescriptions in Ireland—shall possess a higher qualification; and as soon as the possibility of performing the duties with a lower one is established it behoves the Legislature to make that standard universally applicable. In the second place, it is bad policy for pharmacists to ask the State to recognise the competence of individuals possessing a lower qualification than themselves; and, in the third place it is not conducive to the public safety to remove the responsibility from those who are fully competent to those who are not. This latter argument is sustained in the 16th clause of the Irish Pharmacy Bill.

There is, however, a moral side to the question as well as a legal one, and it is this which requires the most serious attention of the trade. Since Mr. Justice Hawkins has told chemists that when they absent themselves from business they must, if they have left no qualified person in charge, lock up the poison cupboard, a large number of chemists have kicked at the confinement and inconvenience which such action would involve. This thoughtless opposition to the requirements of the law arises, we need not doubt, from the comparative indifference which has been given to the law by chemists themselves for more than twenty years. But those who fret under the new yoke forget that many in the trade have been exceedingly careful not to delegate their important functions to unqualified persons, and thereby to secure to the public all that the law demands. Probably they have not so acted without inconvenience to themselves or increasing their business expenses; but they have fulfilled the law, and the care exercised in so doing must have had a good influence on their business success. Apart from that, the smallest return which such law-abiding chemists may expect is that

the strict observation of the law shall be made universal, and that none will have the start of them by shirking it. This applies equally to Ireland, where the duties of qualified persons are greater than those in Great Britain, and the need of assistance is more felt. There large numbers of unqualified assistants are engaged in compounding prescriptions, and, although it is questionable if this is a technical infringement of the law, still the fact that apothecaries and pharmaceutical chemists only may keep open shop for so doing makes it to a certain degree reprehensible. It is true that an apothecary may not absent himself from his shop without leaving an assistant-apothecary in charge, and it is this circumstance which has moved the Pharmaceutical Council to action. The clause which they propose is bad in principle, and is only intended to suit the convenience of employers. Whatever their "temporary absence" may be, whether during the dinner-hour or on a voyage round the world, they take very good care that the market value of the assistant is limited to service with themselves. It is farcical to think of the assistant being able to transact a pharmaceutical chemist's business in his "temporary absence," and yet unable, because incompetent, "to conduct or manage a business, or to keep open shop on his own account." There is no middle way in this matter of qualification: that would be bad for pharmacy. No delegation of pharmaceutical functions to improperly qualified individuals should, for the sake of the public, be permitted; nor should assistants accept the cherry on condition that they take it in two bites—the first might put them in such a condition of contentment that they would delay too long in taking the second. It is much better for pharmacy in this country to stick to the safe lines of the past—the lines which law and medicine still keep—viz., proof on entrance to pupilage of efficient classical education, and examinational proof at the end of the period of training that the individual is competent to undertake all the duties of his calling. It is the higher qualification which is of commercial value and of use to the public, and anything between it and the initial stage would but help to minimise its value and usefulness. We have yet to get proof that there is pressing need for an intermediate qualification, and it is to be regretted that the House of Lords in committee have adopted the clause without discussion.

COMMENTARY.

PRELIMINARY EXAMINATION.—The failures at this examination last month were exceptionally heavy—viz., 60 per cent. as compared with 52 per cent., the average for 1889. Amongst the larger towns Nottingham appears to have come out best, for of 19 candidates 10 passed; out of 43 in London 17 passed; and, in Edinburgh, only 8 out of 26 succeeded in securing the 50 per cent. of marks required for a pass. Cambridge and Southampton came out best, the former with 2 failures in 9, and the latter with 1 in 7.

DRUGGISTS REPLY.—Pressure on our space this week prevents us doing full justice to a statement made by the chemists and druggists of Ireland in reply to the circular of the Pharmaceutical Council which we printed last week. In their statement the chemists and druggists put forward their reasons against the amendments of the Pharmacy Bill proposed by the Society, and they have succeeded in getting a good share of their proposals adopted by the Standing Committee of the House of Lords.

PEERS AND PHARMACY.—To those who are uninitiated in the ways and manners of the British Houses of Parliament

the room of the Lord Chairman of Committees on Tuesday would have been an interesting spectacle. The shrine of lordly legislation is familiarly known as the "Moses room," from the fact that it contains Mr. Herbert's picture of the descent of Moses from Mount Sinai, bearing the tables of stone inscribed with the law—a magnificent piece of artwork entirely covering one side of the apartment. When our representative arrived the committee were discussing a Bill relating to marriages by British consuls abroad, a subject which appeared to engross general attention from the amount of talk bestowed upon it by the noble lords present. Earl Kimberley was in the chair, and on his right were Lord Salisbury and Earl Granville fraternising and consulting with one another as if they had worked in unison all their lives. In close attendance were Lord Knutsford, Earl Cadogan, and the Duke of Abercorn, while opposite sat the Law Lords Macnaghten and Watson, and the Earl of Camperdown. When the Irish Pharmacy Bill came on for hearing, the hulk of these, however, disappeared—another injustice to Ireland—and the fighting line was represented by Lord Erne, the Marquis of Waterford, Earl of Meath, Lord Cork, and others. The noble marquis, although a splendid specimen of the *genus homo*, unfortunately sustained an injury to the spine some time back, and on his attendance at the House usually carries, as he did on Tuesday, a silken cushion to rest his shoulders against. The discussion which arose was interesting, and although at times combative energy was aroused, the courtesy so usual in these debates was always preserved. There was one division, as will be seen by our report elsewhere, and this was decided in favour of the Marquis of Waterford, who was the champion of the Pharmaceutical Society. The committee concluded their labours on the Bill, which is expected to reach the report stage to-day (Friday) and the third reading on Monday.

OLEITE, OR RICINOL-SULPHONATE OF SODA.

By W. A. H. NAYLOR.

IN a paper read before the American Pharmaceutical Association* last year at San Francisco on "Pharmacy as applied to Preparations of the Skin," Mr. Fred B. Kilmer communicated some interesting facts respecting a substance known as oleite.

Chemically this substance is essentially ricinol-sulphonate of soda. The following descriptive outline of the method of its production is furnished by Mr. Kilmer:—"It is prepared from castor oil by treating with sulphuric acid at a low temperature, when a compound of sulphuric and ricinoleic acid is formed. The free sulphuric acid being removed by washing, and any unchanged oil by ether, the resulting sulphoricinoleic acid is then neutralised by sodium hydrate, the finished product being a jelly-like liquid, with a little odour, acid taste, soluble in water, alcohol, chloroform, and essential oils." This description is characterised by brevity and vagueness, while the latter part of it is unfortunately so worded as to invite, if not literally to compel, the deduction of an erroneous inference. In the absence of particular knowledge of the action of sulphuric acid upon certain oils, one would conclude that the product of the reaction between the castor oil and the acid—sulphoricinoleic acid—was not sensibly soluble in water or in ether, while as a matter of fact the reverse is the case.

My present object is simply to supply a working formula for the soda compound, one that I have used and can recommend. Take 1 lb. of castor oil, and add to it gradually, with continuous stirring, 2 oz. by weight of sulphuric acid (B.P.). This part of the process will occupy several hours, and should be timed so as to be finished towards the end of the working day. In the morning introduce in the same manner 1 oz. by weight of the acid, or a sufficiency. The point of

finality is reached when the product remains clear, or, as is generally the case, is only faintly opalescent when diluted with about 40 times its volume of distilled water.

It is convenient for me here to interpolate the remark that the application of a suitable amount of heat is favourable to the reaction. The temperature of the mixed oil and acid may be allowed to reach 110° F., and may, without detriment, even rise to 120° F. When chemical combination is complete, the product is at once intimately mixed with 1½ times its weight of distilled water, and allowed to stand until separation into two distinct portions has ensued. The supernatant and oily layer is then removed and neutralised with a 10-per-cent. aqueous solution of caustic soda. This soda compound is shaken up with 5 times its volume of proof spirit and set aside, when any free oil will rise to the surface. The lower and spirituous portion is evaporated on a water-bath to a thick jelly, the liquid being kept faintly alkaline by the addition of soda solution if necessary.

The resulting product usually contains a small proportion of sulphate of soda, but the quantity is insufficient to rank as a serious objection in view of the uses to which oleite is likely to be applied. If, however, in any case, it is deemed necessary to eliminate traces of alkaline sulphate, the ricinol-sulphonate of soda must be treated with alcohol, in which the latter is soluble and the former practically insoluble.

The free acid (ricinol-sulphonic acid) may be readily obtained by decomposing the soda compound with hydrochloric acid.

FULLER'S EARTH UNION (LIMITED).

AN extraordinary general meeting of the shareholders of the Fuller's Earth Union (Limited) was held at Winchester House, Old Broad Street, on Friday, July 25. Mr. A. J. D. Moser, who presided, said the meeting was called to comply with the requirements of the Joint Stock Companies Act. There were no accounts to present. The board had decided to hold the statutory meeting as late as possible, in order to give them more information than could have been done if the meeting had been held at an earlier date. The purchases were completed, and the company had a thoroughly satisfactory title to all the property acquired. The union took the profits from all the works as from March 31, and the stock-in-trade at the various works was included in the purchase-money. The directors were well pleased with the prospects of the company, and the profits were very satisfactory. To the cost of production, which was an important matter, the directors were giving their most careful and anxious consideration. There were three elements necessary to success—higher prices, rapid sales, and low cost of production. They had made some little progress in reducing the cost of production, but it must take some time before expenses could be reduced to the last farthing. A large number of the personal friends of the directors were shareholders in the company, and their interest was to do the best they could for the company. Mr. Corley (managing director) said the works were taken over by the union as from April 1. From that date the sales had greatly increased, and from the orders now on hand, and others expected, they had every reason to think that the business would increase during the remainder of the year. In reply to a shareholder, who asked if interim dividend would be paid, or only a yearly dividend, the chairman said that was to be left to the board, and the meeting shortly after terminated.

BANKRUPTCY REPORT.

Re WILLIAMS & THOMAS, trading as GRIDLEY & SON, Northgate Street, Chester, Wholesale Chemists.

THE adjourned public examination of these debtors was held on July 22, at Chester Castle, before Mr. Registrar Preston. Mr. H. Roberts, Deputy Official Receiver, intimated that the debtor, Mr. Williams, had failed to supply a satisfactory cash, profit and loss, and deficiency account, as ordered by the Court, in consequence of which there would have to be a further adjournment. The proceedings were accordingly adjourned for the filing of amended accounts.

* "Proceedings of the American Pharmaceutical Association," 1889.

Legal Reports.

SPURIOUS BEECHAM'S PILLS.

IN the Chancery Division of the High Court of Justice, on Friday, June 25, Mr. Cozens Hardy, Q.C., moved, before Mr. Justice North, on behalf of the plaintiff, Thomas Beecham, the proprietor of the well known "Beecham's" pills, for an injunction to restrain the defendant, Benjamin Haddock, a chemist, carrying on business at High Street, Brierley Hill, Staffordshire, and West Bromwich, from selling or offering for sale pills not of the plaintiff's manufacture as Beecham's pills. The defendant was not represented by counsel.

Mr. Cozens Hardy, Q.C., in opening the motion, said that the plaintiff was the proprietor of Beecham's pills, which had had a very large sale for upwards of forty years, and the word "Beecham" was registered as a trade-mark. He had affidavits to prove that the defendant had sold as Beecham's pills, in answer to people who came into the shop and asked for Beecham's pills, pills which were not manufactured by the plaintiff. The learned counsel read affidavits proving what he alleged, and expressing fear that in consequence of these improper sales the plaintiff's reputation was likely to suffer, and loss thereby occasioned to the business.

The defendant did not appear.

Mr. Justice North granted the injunction as asked.

THE IRISH PHARMACY ACT PROSECUTIONS.

IN the Belfast Summons Court, on Friday last, Mr. Thos. McClelland, J.P.; Mr. R. J. Eaton, R.M.; and Dr. McGee, J.P., were again occupied in hearing prosecutions brought by the Pharmaceutical Society of Ireland under the provisions of the Pharmacy Act (Ireland). The cases listed on this occasion came up for judgment, evidence having been heard on that day week. There was no abatement in the trade interest in the proceedings, a large number of pharmacists and druggists being present.

Mr. McInerney, B.L. (instructed by Messrs. Casey & Clay, of Dublin, and Mr. Galway, Belfast), was for the Society; and Messrs. A. McErlean and W. Harper defended.

Mr. McErlean said there were two cases to be decided by their worships—one in which Mr. Robert Campbell, of Great Edward Street, was charged with selling poison without being registered as a chemist and druggist; and, in the other, Mr. Thos. McDowell, of Mount Pottinger, was charged with compounding a medical prescription without due qualification. He had to apply for an adjournment on the ground that the Judges of Assizes were occupied in the city, all magistrates and solicitors being required to give their attendance before the superior court.

Mr. McClelland said they could not adjourn, as the cases had been specially fixed for Mr. McErlean's law argument on that day.

Mr. McErlean said, properly speaking, no other court could sit while the Assizes were going on.

The Court refused the adjournment, and requested to know whether the defence had any arguments to adduce.

Mr. McErlean proceeded at great length, and with much ability, to put forward his views of the law under which their worships were called upon to record a conviction in each of these cases. He remarked that the Poisons Act had not been referred to at all during the proceedings, and that was all the more extraordinary since that Act made it lawful for any person who observed certain safeguards, such as the keeping of a register, to sell poisons in any part of Ireland. According to the Pharmaceutical Society, the statute in that respect had no weight or operation, and the only person qualified to sell poisons was a pharmaceutical chemist. The Pharmacy Act had been passed, it was held, for the purpose of restraining persons from the exercise of the right to sell poisons, and they were then at once brought face to face with the question as to chemists and druggists—the great question which was here at issue. Legislation of a very stringent nature indeed was required to deprive any person of a right which he possessed as a fundamental principle of law. He pointed out that a House of Lords' Committee were at that moment dealing with the whole question.

In the meantime, looking at the Act upon which convictions were sought, they found the necessity of having a register of chemists and druggists; but that register was not forthcoming, simply because it suited the Pharmaceutical Society to disobey or neglect to enforce the Act, and because they thought it wise to have merely one register, and that for pharmaceutical chemists alone. It was said that it was quite discretionary with them to provide a second register; but he asked the Court to follow him in reading the 18th section of the Act, when they would find that the Act was not in any of its clauses to come into operation until a register of chemists and druggists had been compiled. If the Court overlooked the mandate of the section to which he alluded, if they failed to give effect to its clear and broad meaning and its explicit construction, they would cease to be magistrates and become legislators, repealing an Act of Parliament, and doing a grave injustice to a very large body of Irish traders. It was as plain as anything well could be that the Court "shall not" (he used the words of the Act itself) give effect to the Act until regulations had been drawn up for keeping a register of chemists and druggists.

Mr. Eaton: There are no chemists and druggists at all. Your clients are not chemists and druggists, and we cannot recognise them as such.

Mr. McErlean: It is admitted that there are chemists and druggists.

Mr. McInerney: Indeed it is not.

Mr. McErlean: For the purposes of the Act, it is clear that there must be chemists and druggists.

Mr. McInerney: It is our contention that they are not chemists and druggists at all.

Mr. McErlean said it would be a begging of a broad question to deny that there were chemists and druggists when the Act of Parliament itself specified chemists and druggists, recognised them as such, provided that regulations should be made for them, and a register of them kept. It might as well be argued that chemists and druggists had no existence before the Act of 1875 was passed. To attempt to wipe out a respectable trade in that fashion would be a very high-handed proceeding; but he saw little difference between that and the contention which they were now told was to be pressed upon the Court—a tribunal which was, for the time at least, irresponsible. He called upon the magistrates to get rid of the impressions which the prosecution had forced upon them, and, by the application of their own intelligence, judgment, and common sense to the reading of the law, give such an equitable interpretation as would be consistent with the spirit which animated the Legislature when it passed the Pharmacy Act. The 24th section provided that the Registrar should maintain a register of pharmaceutical chemists, to be called the Register of the Pharmaceutical Society; and it added they should also make a complete list of chemists and druggists, to be called the Register of Chemists and Druggists in Ireland. Could anything be plainer or more specific than that? The Register of Chemists and Druggists could not be made out until the Society—the Pharmaceutical Society—defined the term "chemist and druggist." The Society had failed to carry out its obvious duty in that way, and then the Council came in and said that there were no chemists and druggists, and those calling themselves such were liable to penalties. He appealed to the Court to act up to the letter of the Act by suspending its operation until the words of instruction to the Society had been considered by the complainants, and their meaning applied to the situation that existed in all parts of the country where chemists and druggists were trading. Reading the 18th and 24th sections of the Act, either separately or in conjunction, there was ample reason to justify their worships in refusing to impose a penalty in either of these cases. He hoped they would rise superior to the spirit that sometimes disgraced the administration of law in Ireland, and endeavour to do that which, however viewed, would be best to the public advantage.

Mr. McClelland said his brethren and he had considered all the circumstances, and they saw no reason why they should not in Mr. Campbell's case, as in previous cases, impose a fine of 5*l*.

Mr. Harper said he would have to ask to have a case stated for the Superior Courts. There was undoubtedly a grave question involved in the construction of the Pharmacy Act, and it was but reasonable that they should be enabled

to carry it for argument to a higher tribunal. If their worships did not grant his application he would have to see what further action his client would be disposed to take.

Dr. McGee: You cannot compel us to state a case unless you get a mandamus.

Mr. Harper hoped there would be no necessity for doing that.

Mr. McClelland said at present they saw no question worthy of going before a higher court, but if Mr. Harper gave in the usual notice they would let it have the best consideration.

Mr. Eaton: The only point is that as to the term "chemists and druggists" does it apply to the chemists and druggists existing before the Act passed, or to those both before and after?

Mr. McInerney applied for costs, but the Bench decided that costs should not be given. Counsel said he only mentioned the matter, as he had little expectation he would get anything.

Mr. Eaton said Counsel need not press his application. The magistrates had imposed the minimum fine provided by the Act of Parliament, and if they could have made it lower they would have done so. The questions at issue were actually before Parliament, and a change would soon be made in the law.

In the case of Mr. McDowell a fine of 5*l.* was also inflicted, Messrs. McElean and Harper considering further argument needless.

This terminated the proceedings.

MINERAL-WATER BOTTLEERS AND THE MERCHANDISE MARKS ACT.

At the North London Police Court last Saturday Mr. Haden Corser gave his decision in the case of the London Mineral-water Trade Protection Society against James Hickling, aerated-water manufacturer, of Commercial Road, E., as reported in THE CHEMIST AND DRUGGIST last week. The magistrate said the defendant was summoned for selling his mineral waters in bottles bearing the registered trade-marks of R. White & Sons, contrary to the 2nd section of the Merchandise Marks Act of 1887. An inspector of the London Mineral-water Trade Protection Society had gone to the "Woodberry Tavern," at Finsbury Park, and purchased a dozen bottles of mineral waters bearing the labels of the defendant, but two of the bottles bore the registered trade-mark of R. White & Sons, and one the registered trade-mark of Batey & Co. In the case of Wood v. Burgess, Mr. Bros, the magistrate, had dismissed the case, because he said fraudulent intention had not been proved; but the judges of the Appeal Court sent it back for the magistrate to convict. The contention of the Lord Chief Justice was that there was no necessity for the proving of fraudulent intention, but as to whether the defendant had acted innocently in the matter. The fact of the defendant filling other people's bottles and putting his own labels on them was a contravention of the Merchandise Marks Act. It was a pity, however, said Mr. Haden Corser, that the judges did not define what "innocently" meant. On behalf of the present defendant it was urged that he was protected by certain provisos, viz., that he took reasonable precautions against committing the offence charged; that he had at the time of the commission of the alleged offence no reason to suspect the genuineness of the trade-mark or trade description; and that he gave to the prosecutor all the information in his power with respect to the persons on whose behalf the trade-mark or description was applied. The allegation was that defendant had filled other people's bottles, and therefore he was guilty of an offence; and he (the magistrate) did not consider that the manufacturer came within either of the three exceptions named. There was a similarity between the Wood v. Burgess and the present case, so far as the filling of bottles was concerned; and yet a difference, because the one had, and the other had not taken reasonable precautions. But though there was a difference, it did not affect the quality of the offence, though no doubt it would affect the punishment. The exceptions named he (the magistrate) considered applied only to the persons who handed on the goods from the manufacturer. For instance, the retailer had fully protected himself by getting an assurance that the goods contained in bottle, box, or canister were as stated

on the cover; and when he had got this question satisfactorily answered he acted innocently if he handed such goods, even if they were not as described, on to other people. If, however, the retailer does not take the trouble to assure himself that the goods are what the cover purports, he is equally liable for any fraud committed. How could a man who deliberately put his goods inside another man's cover be said to have acted innocently? He may have acted inadvertently; but no set of circumstances would make him (the magistrate) consider that he had acted innocently. Of course there would be differences as regarded penalty, whether there was one foreign bottle in a gross or a dozen. He believed the defendant in this case (though he had taken precautions by posting up a notice that any persons filling foreign bottles would be dismissed) had committed an offence under the Merchandise Marks Act; and, taking into consideration that defendant had been previously cautioned and fined by the Council of the Trade Protection Society (as admitted by himself), he would be fined 5*l.*, or, in default of distress, fourteen days' imprisonment.

A CHEMICAL DISPUTE.

IN the Queen's Bench Division of the High Court of Justice, London, on Saturday last, the case of Bath & Son v. Le Chevalier Frères et Cie. came before Mr. Justice Grantham and a special jury. This was an action brought by Messrs. Henry Bath & Son, chemical merchants, of New Broad Street, E.C., against Le Chevalier Frères et Cie., of Paris, to recover 12,491*l.* as damages for breaches of four contracts made in November, 1888, for the purchase of large quantities of nitrate of soda. The damages claimed were the difference between the contract prices and the prices realised when sold by the plaintiffs after the default of the defendants to accept delivery. The defendants pleaded, in defence, that the contract was governed by the law of France, and that this Court had no jurisdiction. They further pleaded that they had been discharged from liability by the French bankruptcy law. Mr. Cock, Q.C., appeared for the plaintiffs; the defendants were not represented.

The plaintiffs proved the contract, and gave evidence that they had always been ready and willing to carry out their part of the contract, and deliver the nitrate of soda. The nitrate was re-sold at the best price that could be obtained.

The jury returned a verdict for the plaintiffs. His Lordship gave judgment for the plaintiffs for the full amount claimed, with costs.

APOLLINARIS, FRIEDRICHSHALL, AND HUNYADI WATERS.

IN continuation of the applications *re* the Apollinaris Company (Limited), reported by us last week as being before Mr. Justice Kekewich in the Chancery Division of the High Court of Justice, Mr. Rigby, Q.C. (with whom were Mr. Ralph Neville, Q.C., and Mr. J. Cntler), on behalf of the company, applied to register in class 3, which applies to chemical substances, a mark relating to a medical compound or substance, consisting of salts extracted from Apollinaris water, to be used in medicine and pharmacy. The counsel who appeared in the first case heard for the Vichy Mineral-water Company of France, as successors in this country to the business of Messrs. Ingram & Royle (Mr. Warrington, Q.C., and Mr. Sebastian) opposed the application, and, at the conclusion of the arguments, his Lordship dismissed it with costs, holding that the applicants had not complied with the requirements either of the Trade Marks Act of 1883 or the amending Act of 1888, "Apollinaris" being a word in common use, and in no sense a fancy word.

Mr. Rigby then applied to register in class 44, for mineral-waters, three labels—one consisting of circles and anchors, another a triangle, and the third a diamond, all containing certain words, and (as the learned counsel contended) being in themselves distinctive. These marks, he added, were probably intended not so much for use in this country as for markets abroad, and applicants could not get registration in some countries without preliminary registration here.—Mr. Warrington opposed this on the grounds, among others, that the words were not distinctive, and the marks were not new. Mr. Kreuzberg, the discoverer of the Apollinaris spring and the assignor to the company, had used at least portions

of the mark long before this application was made.—These applications were also refused on the grounds on which they were opposed.

Mr. Warmington then, on behalf of the Vichy Company, applied for the expungement from the register of certain marks on Friedrichshall waters. The facts, he said, very much resembled those in the Apollinaris case, what differences there were being in favour of the applicants. In the present instance there was no contract between the owners of the spring and the Apollinaris Company giving them an exclusive right to its produce—they were simply importers of the water, with a right to sell it in England; and under a reputation built up in this country, largely at the applicants' expense, the Apollinaris Company (as he showed by affidavits) were trying to shut them out from the sale of the water in this country. The applicant company had in their possession in France this Friedrichshall water, which they wanted to sell in England, and there was nothing to prevent their doing this but the impeached trade-marks.—Mr. Neville, for the Apollinaris Company, submitted that legally there was no distinction between this case and the last, in which his Lordship held that the applicants were not the persons aggrieved. The Apollinaris Company had (the learned counsel said) the exclusive right to the sale of the Friedrichshall water in this country, they undertaking not to sell it, or allow it to be sold, on the Continent, beyond which it could not be sold without the licence of the owners.—His Lordship said he thought this case was almost on all-fours with the one he had had to decide on the previous day, where he had felt bound to hold that the applicants, the Vichy Company, who had sought to have the register rectified, had failed to show that they were in any way aggrieved. In the present case there was no legal damage or grievance, and therefore the application must be dismissed, with costs.

Coming to the next motions to expunge other Friedrichshall marks, Mr. Warmington, with the view of not wasting the time of the Court in going over already-trodden ground, suggested a formal agreement between counsel—in the event of the cases being carried to the Court of Appeal—that the principle already decided by his Lordship should be held as applying to this application, Mr. Warmington adding that he was proceeding upon this assumption: Had his Lordship thought the applicants were aggrieved persons, the marks would have been expunged.—His Lordship said that was so, and added there could be no objection, and it would obviously save the time of the Court, formally to have some agreement, as was suggested—the object, as he understood, being that the parties should not be upset on any formal objection in the event of the cases going before the Court of Appeal. The suggested agreement was consequently arrived at.

Mr. Aston then moved on behalf of the Vichy Company—Mr. Sebastian being his junior counsel—for the expulsion from the register of certain marks referring to the Hunyadi Janos water, Mr. Neville and Mr. Cutler appearing on this application for the Apollinaris Company, and Mr. Warmington, with Mr. Grosvenor Woods, watching the case for Mr. Saxlehner, who claimed that the marks were his and not the Apollinaris Company's, who were his agents in the matter. He had, Mr. Aston said, to differentiate the objection in this case to the marks being on the list from the objections already decided by his lordship in the other two cases. What took place here was that Ingram & Royle were selling a water called Hunyadi Laszlo, and the Apollinaris Company, on the strength of their holding the mark Hunyadi Janos—improperly registered, as the applicants alleged, because they were not proprietors—had given them notice of proceedings unless they undertook to discontinue the sale of the Laszlo water.—In answer to his Lordship, Mr. Aston said he was instructed, but it was not in the affidavits, that the name Hunyadi Janos was not a spring, but the name of a Hungarian general. Following on the popularity of the Janos water, the Apollinaris Company alleged other waters were being sold called Hunyadi Laszlo, the name of the son of the general. He submitted that the objection of the Apollinaris Company could not be maintained.—Mr. Neville said the applicants seemed to have confounded their position with that of the Compagnie Générale, but the Apollinaris Company had offered to give an undertaking not to rely on any user beyond that of using the combination of the words

Hunyadi Janos, neither word being used by itself.—His Lordship having heard the correspondence on the point, asked Mr. Aston how he was aggrieved, and the learned counsel replied it was only an undertaking in regard to themselves, and their customers might be proceeded against.—His Lordship said he had nothing to do with them.—Mr. Aston said threats were admitted, and that surely was a grievance, besides which they had no guarantee that they would not be proceeded against in reference to the word Hunyadi.—His Lordship said no doubt the threat constituted a grievance, but it had been withdrawn in the most unqualified manner, and he held the applicants were no longer aggrieved persons within the meaning of the Act. The application he refused, but the Apollinaris Company must pay all the costs, consequent on their offer to withdraw having been made only within the last three weeks.—Mr. Warmington pointed out that this decision did not determine the validity of the trade-mark which Mr. Saxlehner claimed, and he applied for the postponement of the hearing of that point. This his Lordship granted.

KEEPING UP THE PRICE OF AERATED WATERS.

At the Bolton County Court, before Judge Jones, last week, the Bolton District Mineral-water Makers' Association sued Messrs. Whitelegg Bros., aerated-water manufacturers, Farnworth, for the sum of 10*l.*, representing a fine imposed by the association for infringement of the rules. It appears that the association maintains the price of aerated waters, and that they fixed 9*d.* per dozen as the minimum to be charged. The defendants were members of the association, and it was found that in April they were selling at less than the fixed price. Messrs. Whitelegg, on being summoned before the Association, promised not to continue this, but a month later it was found that they were again selling at a lower rate, and they admitted they had done so.

Mr. Wm. Hall, president of the association, in the course of his evidence, admitted that the objects of the association were to a certain extent to increase the profits—in fact, to put more money into the pockets of the members, of whom there were about twenty-three. He also admitted that members had sold at less than the stipulated price, but it was in districts outside their pale.

For the defence Mr. Fielding contended that the contract between the parties was void as being in restraint of trade; that it was an illegal association consisting of more than twenty members, was established for gain, and was unregistered; and that it was void under section 4 of the Companies Act, 1862; that it was an unregistered trades union, and was void under sections 4 and 23 of the Trades Union Act.

In giving judgment, his Honour held that the agreement between the parties was only in partial restraint of trade, and therefore valid; that the association had nothing whatever to do with gain, except in so far as it restrained its members from selling below a certain price; and that the authorities clearly showed that the association did not come within a fair view of the Trades Union Act. Therefore there would be a verdict for the plaintiffs for the amount claimed in both of the two cases which stood against the defendants. Costs were allowed, and leave given to appeal.

Gazette.

PARTNERSHIP DISSOLVED.

Geldart, T., & Humphreys, W. (under the style of T. Geldart, and also of T. Geldart & Co.), Leeds, soft-soap manufacturers.

THE BANKRUPTCY ACT, 1883.

ORDERS MADE ON APPLICATIONS FOR DISCHARGE.

Greensmith, Joseph Henry, Nottingham, aerated-water manufacturer (trading with T. Pashley as Pashley and Greensmith)—discharge suspended for three months.

Thompson, James Andrew Baird, Totnes, doctor of medicine and surgeon—discharge granted.

LAWYERS ON PHARMACEUTICAL LAW.

IN this journal on July 12 we published an article under the above title, in which we criticised adversely a little book entitled "Medical Law for Medical Men," by Percy Clarke, LL.B., solicitor, and Charles Meymott Tidy, M.B., F.C.S., of Lincoln's Inn, barrister-at-law, professor of chemistry and of legal medicine at the London Hospital. In that book the authors professed to give an exposition of the laws affecting chemists and druggists in the United Kingdom. We found ourselves compelled to condemn the Manual as utterly untrustworthy, basing our opinion on the numerous errors and aniguities which we found in the sections relating to pharmacy law. We quoted specimens of the misleading readings of the Acts which we found in the book, but we did not enter into each minutely. The authors now send us the appended letter. We give publicity to their statements with pleasure; and if only matters of opinion between us were involved, we would publish the letter without comment. But to do so would be liable to lead to some misapprehension, and it becomes, therefore, almost necessary to interject corrections of the authors' errors. We have distinguished our own remarks from those of the authors by bracketing the former. Here follows the letter:—

SIR,—Our attention has been directed to an article in your issue of the 12th inst., upon this Manual of our joint authorship. Pressure of work has alone prevented our acknowledging before this our obligation for your comments and criticism; but we should feel obliged by your inserting the following letter by way of reply thereto:—

1. We do not think that qualification is necessary for any person to supply drugs, chemicals, and medicines, except when these include any of the poisons scheduled to the several Acts 31 and 32 Vic., c. 121, and 33 and 34 Vic., c. 26, or declared poisons by the constituted authorities. We have not asserted this. We do assert as our opinion, on the authority of *Cope v. Rowlands*, Q. Mee and W. 149, and have, we think, clearly stated in our book, that qualification is necessary in order to enable a person supplying drugs, chemicals, and medicines to recover payment for same.

[The authors define "chemist" (page 110) as "a person who is qualified . . . to supply drugs, chemicals, medicines, and poisons." *Cope v. Rowlands* is not an Act of Parliament, and British law knows of no qualification to supply drugs, chemicals, and medicines.]

2. It is correct to state that chemists and druggists of Great Britain are registered under the Pharmacy Act 1868 (31 and 32 Vic., c. 121)—not under 15 and 16 Vic., c. 56, but it is equally correct to state that certain chemists (*i.e.*, pharmaceutical) are registered under 15 and 16 Vic., c. 56.

[Pharmaceutical chemists are registered under the Act of 1852; but the registers of pharmaceutical chemists and chemists and druggists which are evidence in law courts were provided for by section 13 of the Act of 1868. The authors state (page 110) that pharmaceutical chemists and chemists and druggists are "registered as such under the Pharmacy Act 1852."]

3. We admit that there is no Pharmacy Act of 1858. This is a printer's slip for 1863. We are obliged for having our attention directed to it.

4. By section 20 of 31 and 32 Vic., c. 121, it is provided that "Every person who shall have been registered as a chemist and druggist . . . shall be eligible to be elected an associate of the Pharmaceutical Society (*that is, of Great Britain*), and every such person so elected and continuing as such associate, being in business on his own account, shall have the privilege of attending all meetings of the said Society, and of voting thereat," &c.

By section 21 of the same Act, it is provided that "At all meetings of the Pharmaceutical Society at which votes shall be given for the election of officers, all or any of the votes may be given either personally or," &c. The marginal note in the statute-book to this section is "Voting papers for election of Council." It was from a consideration of these sections that we stated as our opinion, as we still

state, that the Council is properly "elected by the associates of the Society."

[The authors are in error in regard to the voting for Council, because they are not aware of the distinction between "associates of the Society who are not in business" (who have no votes for Council) and "associates of the Society who are in business" (who have votes). If they will get the Society's Calendar they will find separate lists of these.]

By section 5 of 15 and 16 Vic., c. 56, provision is made for the registrar to keep a register "of all persons being members of the said Society, and also of all persons being associates," &c.

By the 10th section of the same Act it is provided that every "person duly registered as a pharmaceutical chemist shall be eligible to be elected as a member of the said Society," and every "person duly registered as an assistant shall be eligible for admission as an associate of the said Society."

By section 20 of 31 and 32 Vic., c. 121, chemists and druggists are eligible as associates, as stated in reply No. 4. We are unable on consideration to see how, considering the necessity we were under to compress matters in our Manual, the law could have been more intelligibly stated for practical purposes than in the manner we have adopted.

[On page 111 of the Manual it is stated that the Council is "elected by the members and associates of the Society, *who are themselves respectively elected from the pharmaceutical chemists and chemists and druggists*." We said those words were misleading, though strictly accurate. The persons named are eligible for election as stated; but we should think a reader would assume that the process is to elect certain members and associates, who elect the Council—on the American presidential election system.]

6. By section 18 of 38 and 39 Vic., c. 57 (the Pharmacy Act relating to Ireland) it is provided, "Every person who shall be registered under this Act as a chemist and druggist shall be qualified to be elected an associate of the said Pharmaceutical Society (*that is of Ireland*) subject to the regulations made in pursuance of this Act, and every person so elected and continuing," &c. The section proceeds in the precise words of section 20 of 31 and 32 Vic., c. 121 (see above reply 4), to confer a right of voting on chemists and druggists. By section 16 of the same Act (38 and 39 Vic., c. 57) the Council might make regulations as to meetings, examinations of persons, times and modes of election of members and associates, mode of elections of members of Council, and of President, &c., fees to be charged, duties of registrar and other officers, and generally for all such other matters as may be necessary for the due execution of this Act.

These regulations may be revoked at subsequent meetings, and have to be approved by the Lord Lieutenant and Privy Council. None of these regulations could take away the right of registered chemists and druggists of being eligible as associates with power of voting at meetings.

[The authors have overlooked section 15, which gave an optional power to the Irish Council in regard to the title "chemist and druggist," and they are probably unaware that the Council decided not to create that grade, and that, as a matter of fact, it does not exist as a part of the Pharmaceutical Society of Ireland to this day.]

7. The Act of 15 and 16 Vic., c. 56, section 8, gives power to the Pharmaceutical Society of Great Britain to appoint examiners to examine "all persons who shall present themselves for examination under the provisions of this Act," *i.e.*, all candidates for a certificate of qualification as pharmaceutical chemists. The 6th section of 31 and 32 Vic., c. 121, empowers and requires the examiners appointed for the purposes of the Act "to examine all such persons as shall tender themselves for examination under the provisions of this Act," *i.e.*, candidates for certificates of qualification as chemists and druggists. By section 21 of 38 and 39 Vic., c. 57, "all persons desirous of being registered as pharmaceutical chemists . . . shall be examined with respect to their knowledge," &c., and "all persons desirous of being

registered as chemists and druggists under this Act shall be subjected to a modified examination," &c.

The word "persons," it will be observed, is used throughout, but the tendency of all decided cases is that unless persons of the female gender be expressly referred to, words which can include both male and female persons must be construed as including males only. (*See Beresford-Hope v. Lady Sandhurst*, 23 Q. B. D., 79.) Hence, we still are of opinion that the Pharmaceutical Societies are not bound to examine women.

[We will not dispute this "opinion," though we do not agree with it. As a matter of fact, the pharmaceutical examiners do examine women.]

8. As there are no words limiting the practice of pharmaceutical chemists and chemists and druggists to the United Kingdom, we are of opinion that they can practise, and, upon proof of registration, recover for goods throughout the British dominions.

[The authors will perhaps be surprised to learn that British chemists and druggists may not practise as such in Ireland, nor Irish pharmaceutical chemists in Great Britain. Canada and Heligoland are closed to both. The Pharmacy Boards of the Australasian colonies accept British and Irish certificates, but they do this by express enactment, not because they are required to do so.]

9. It is, we admit, not correct to state that "assistants in active practice for three years prior to 3rd December, 1858, are entitled to registration."

The numeral "3rd" should be 31st—another printer's error, the correction of which we gratefully acknowledge.

10. As to notification of changes of address, these need not necessarily be sent to the chemists' registrar originally registering; nor do we assert this, but we say and maintain that it is far better for chemists to carry out this course, and so avoid confusion.

[The authors miss our point. They say "it is highly important that on change of address notification should be sent to the chemists' registrar *who originally registered the person so moving*." The absurdity of this paragraph lies in the words we have italicised. The registrar who originally registered some of us is dead; another is living in retirement. Why should we be told to communicate with either of those gentlemen?]

11. As to exemption from service upon juries.

By section 9 of, and the schedule to, 33 and 34 Vic., c. 77, registered pharmaceutical chemists, "if actually practising as pharmaceutical chemists," are exempt from serving upon juries in England. It is the better opinion that all chemists may bring themselves within this exemption. The intention of the Legislature was to exempt persons who from reasons of public policy should be exempt; and a chemist's and druggist's duties are almost, if not quite, as responsible as those of a pharmaceutical chemist. By 6 George 4, c. 22, sec. 2, it is true that exemption in Scotland is limited to physicians and surgeons duly qualified as such, and actually practising; and it is thought that, for the same reasons of public policy, chemists may claim a similar exemption.

As to chemists in Ireland, section 20 of 39 and 40 Vic., c. 78, exempts pharmaceutical chemists duly registered. For the reasons stated above as to chemists in England, it is our opinion that chemists and druggists in Ireland may claim exemption under this head.

[The argument is sound that all chemists ought to be exempt from jury service, but the authors are hopelessly wrong if they mean to maintain that all chemists are exempt.]

12. We have again carefully considered the schedule or list of poisons we have given, and are unable to find that it is incomplete. We admit that we should have said that as to Ireland the King and Queen's College of Physicians of Ireland might extend the list, not "the Royal College of Physicians"—a body which has no existence. We acknowledge the correction with thanks. We also believe, on careful consideration and from the long experience in the subject of one of us, that we have correctly "comprehended" the

distinctive regulations made in the statute (the Act of 31 and 32 Vic., c. 12, is meant) with regard to the sale of poisons in part 1 and of those in part 2 of the schedule. We regret to find that we differ in opinion from one so able as the writer of the article.

[The authors omit "nux vomica and its preparations" from their list of poisons, and they are not accurate in the list otherwise. They say that the list may be extended (in Great Britain) by the Pharmaceutical Society of Great Britain, ignoring the necessary consent of the Privy Council; and they do not "comprehend" that entry of sales in the poisons-book is required in respect of poisons in part 1 of the schedule only. We should have ourselves expected that "the long experience in the subject of one" of them would have ensured a comprehension of this subject; but it evidently has not had that effect yet.]

13. It is regrettable, but the fact, that "vendors of patent medicines may sell all poisons with impunity," without having qualification. Of course, poisons made up in patent medicines are meant. Thus a grocer may, as a matter of strict right, without offending against any of the Acts relating to Great Britain or Ireland, sell sufficient laudanum in a bottle of patent medicine to poison a village.

[The book says that the penalty on unregistered persons selling poisons "does not extend to vendors of patent medicines." To what extent so-called patent medicines may be sold by unregistered persons is, as yet, a matter of some doubt; but it is certain that the way the law is expounded in the Manual is wrong. How was the uninstructed reader to know that the authors were only referring, as they now tell us, to "poisons made up in patent medicines"?)

14. As to prosecutions for sale of poisons, the word "except," preceded by a bracket, should be read in after the word "act" and before the word "such" another bracket following the word "etc." in the next line. We had not noticed the omission in the printer's proof, and we are obliged for the correction which makes sense.

[This refers to a paragraph indicating who may prosecute for offences against the Pharmacy Act. When corrected as prescribed above, the paragraph is less intelligible than it was before.]

15. We cannot think that it is only by chance that a reader would find that persons holding certain foreign and colonial diplomas in medicine, &c., are entitled to registration. These diplomas are treated in a chapter by themselves for two purposes: firstly, because they are registered in a distinct medical list; secondly, in order to accord them the importance they merit. To prevent them from being overlooked a footnote on page 17 refers forward to this chapter.

[We complained that a list of registrable qualifications was not complete. The footnote, it is true, makes this criticism less serious.]

16. By section 12 of 16 George II., c. 8 (an Act which directs licences to be obtained by persons desirous of retailing spirituous liquors, and has not been repealed), it is provided "that this Act or anything herein contained shall not extend to any physicians, apothecaries, surgeons, or chymists as to any spirits or spirituous liquors which they may use in the preparation or making-up of medicines for sick, lame, or distempered persons only." Therefore we are of opinion that it is right to say that "a medical man may sell spirits as incidental to and compounded with medicines without excise licences."

[The book says—"a medical man qualified to supply medicines may sell spirits, as incidental to, and compounded with, medicines, without an excise licence; but for the manufacture of essences, perfumes, &c., by distillation, he must apply for a licence from the licensing Justices of the Peace, whose clerk will give him full information." There is the paragraph, punctuated just as it appears in the book. It would be a reasonable inference from it that a medical man might sell a bottle of brandy to his patient. We said this statement was either wrong in law or clumsy in English, and we say the same still.]

17. When we speak of "the private remedy" of a patient if he suffers damage through the impurity or inefficacy of drugs or medicines, we do not mean punching the practitioner's head; nor, in our opinion, could any similar rendering be attached to this use of the word "private," as contradistinguished from "public" used immediately before in connection with the word "prosecution." In legal as well as common parlance, criminal prosecutions are called public, civil actions private, remedies.

[We did not know that in legal as well as common parlance civil actions were called private remedies. Anyway, the parlance is inaccurate.]

18. With regard to the use of the word "stores," this was used advisedly. The leading case as to a corporation carrying on a chemist's business is that of *The Pharmaceutical Society v. London and Provincial Supply Association*, 5 App. Cas. 857. In this case the Association was registered as a limited company under the Companies Acts 1862-7; but the law upon the point applies, in our opinion, with regard to all corporations, and we use the word "stores" because it is in the case of these corporations that the question is most likely to arise whether they be registered with limited or unlimited liability or be not registered at all.

[They used the word "stores" advisedly, when they meant "corporations." This is alone sufficient to condemn their work. Every shop is a store, and there are hundreds, expressly so called, which have nothing to do with corporations.]

Having now addressed ourselves to every point raised by you upon our hook except that as to inspection of drugs and medicines—an explanation of which we must ask you to allow us to make at some later period, as we are both pressed with work at the present—it remains for us to apologise to you for taking up so much of your space, but to trust to your courtesy to insert this reply.

Thanking you by anticipation,

We are, Sir, yours, &c.,

THE AUTHORS,

"Medical Law for Medical Men."

Obituary.

POTTS.—On July 17, Mr. Richard Smith Potts, chemist and druggist, Robin Hood's Chase, Nottingham. Aged 83.

SUSSDORF.—Professor Heinrich Julius Gottfried Sussdorf, who died on July 13, in Dresden, aged 68, was a notable figure in German pharmacy. He was a native of Gotha, and, after having been apprenticed to the "Hofapotheker" of that aristocratic city and duly passed his examinations, he established in 1845 a school of pharmacy in Dresden, to which, before long, he added the position of lecturer at the "Surgical and Medical Academy" then existing in Dresden. This academy was subsequently abolished, and a veterinary school established in its place, with which Sussdorf also became prominently connected. In 1867 Sussdorf was named Professor of Pharmacy, and in 1871 he received the appointment of an inspector of pharmacies for the kingdom of Saxony, a position which he filled until his death, occupying himself almost to the last with its duties.

WOODWARD.—The death occurred, on July 18, of Mr. William B. Woodward, a member of the firm of E. Fougere & Co., importers of French drugs and proprietary goods, New York. A short time since Mr. Woodward, who had been ailing for a long time, started on a European trip in the hope of benefiting his health, but after arriving at Liverpool his condition became worse, and he found it necessary to take the next steamer home, where he died from Bright's disease. Mr. Woodward was 50 years old, and began life as an officer in the American navy, in which he served throughout the Civil War. He afterwards entered the wholesale paint business, and, in conjunction with Mr. Heydenreich, purchased the business of E. Fougere & Co. about twelve years ago.

Trade Notes.

THE directors of Bovril (Limited) recommend a dividend at the rate of 20 per cent. per annum for the year ended June 30, 1890.

MR. W. GARDNER, Gloucester, is exhibiting his patent "Rapid" sifters and mixers at the Yorkshire Agricultural Show, Harrogate.

MESSRS. BRATBY & HINCHLIFFE (LIMITED), aerated-water engineers, of Manchester and London, have paid an interim dividend at the rate of 10 per cent. per annum on the ordinary shares of that company.

THE directors of the Salt Union (Limited) have declared interim dividends for the half-year ended June 30 last at the rate of 7 per cent. per annum on the preference shares and at the rate of 6 per cent. per annum on the ordinary shares.

MESSRS. SINGLETON & COLE (LIMITED), Cannon Street, Birmingham, have issued a complete price list of tobaccos, cigars, cigarettes, snuffs, and tobacconists' sundries, which will no doubt prove useful to many chemists.

MESSRS. SHARLAND & CO., of 119 and 120 London Wall, E.C., have been appointed buying agents for Messrs. F. H. Faulding & Co., of Adelaide, which is an addition to their commissions for Messrs. Dnerdin & Sainsbury, Melbourne, and Sharland & Co., Auckland and Wellington, New Zealand.

MR. VINCENT WOOD, of 3 St. Andrew Street, Holborn Circus, E.C., wishes us to state that in his "Eureka Galvano-Electric Continuous Battery Belt" the elements are connected by an insulated wire, which we failed to discover. But it is there, nevertheless, so Mr. Wood is quite justified in asking us to make this correction.

LIQUOR KAVA-KAVA CO.—This is a preparation made by Messrs. Potter & Clarke, of Raven Row, E., for the treatment of urethral disorders. It is a compound of kava-kava with several other remedies of repute, and is well spoken of in the treatment of the diseases for which it is designed. The liquor is not at all unpleasant to taste, and is given in $\frac{1}{2}$ to 2-drachm doses.

MESSRS. BLONDEAU ET CIE. send us a sample of their "Vinolia" shaving-soap, in stick. This soap is prepared on the same principle as their other soaps, and, while it is perfectly neutral, it gives an abundant lather, which does not dry on the face during an ordinary shaving operation. The soap is delightfully perfumed, and is put up in a neat style.

MR. W. WILLIAMS, of 99 Faulkner Street, Liverpool, sends us a copy of a syphon account-book, which he has designed for himself, and which others in the trade will doubtless find to be very useful. It shows where the syphons are, and when sent out and returned, and as this is done on paper ruled for a month, a balance can easily be struck at the end of each month. The book may be obtained from Messrs. Evans, Sons & Co., of Liverpool.

INVIGORINE.—This tonic must be very familiar to the subscribers of this journal, the announcement which the manufacturers made in our DIARY having received a plurality of votes in one of our postcard competitions. We may explain that "Invigorine" is a mixture sent out in 8-oz. bottles with eight powders, and is taken effervescing in one-eighth parts. It is very palatable, and is said to be a powerful restorative and tonic as well as digestive.

MR. J. JONES, from Shrewsbury Road, London, W., has opened a business at Barry Dock, South Wales.

THE HOLLOWAY TRAGEDY.—At the Central Criminal Court, on Thursday, before Mr. Justice Grantham, Richard Arthur Oakes (59), described as a chemist, and his wife, Amy Oakes (46), were jointly charged with the wilful murder of their son, Arthur Augustus Oakes, a child eight years of age, by poisoning him with strychnine. The jury found both prisoners guilty; but that at the time they were not responsible for their actions. They were ordered to be confined during her Majesty's pleasure.

Trade Report.

Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., July 31.

GREAT quietness prevails in the Mincing Lane markets, nor is the stillness likely to be interrupted during the coming week, which will be partly broken by the Bank holiday. The principal alterations in drugs are a greater firmness in cinchona, which sold at slightly higher prices. Ipecacuanha is also several pence dearer, musk has been in greater demand, and the prices of several essential oils—especially citronella, lemon-grass, cinnamon, bergamot, and lemon—show a distinct tendency to improvement. Senega also comes firmer from America, but for Angostura Tonquin beans lower prices may be anticipated. In fine chemicals three important articles—quinine, citric acid, and tartaric acid—are on the upward path, but cream of tartar is slightly easier. In drysalteries and heavy chemicals shellac is lower, gambier weak, and sticklac, isinglass, sulphate of ammonia, soda crystals, and caustic soda show more firmness.

ALTERATION IN THE HOURS OF 'CHANGE.—The following announcement was published on 'Change to-day:—"Notice is hereby given that on August 15 next the four gates of the Royal Exchange will be closed for admission at half-past 3 P.M. precisely, and will be open for the purpose of egress only till 4 o'clock. This arrangement will continue for the space of six months from the above date, after which the Gresham Committee will again take the matter into their consideration. By order, John Watson, Clerk to the Committee. Mercers' Hall, July 29."

ACID (CITRIC).—Firm and decidedly dearer, the price asked to-day being 1s. 3½d., though we have not heard of any sales over 1s. 3½d. so far. The news comes from Sicily that the concentrated lemon-juice is advancing, the price for immediate shipment being 17l. f.o.b., and for forward delivery 18l. f.o.b. The winter crop of lemons, which is the principal one, and which is due on the market in October and November, is promising very badly.

ACID (TARTARIC).—About ½d. dearer since the beginning of the week, and quoted to-day at 1s. 2d. to 1s. 2½d. for foreign brands, while English is not obtainable under 1s. 2½d. at lowest. All the German makers have formed a combination, which comes into force to-morrow, and the price fixed by them is said to be 1s. 3d. per lb. c.i.f., English ports. The three English manufacturers, so far as is known, remain outside this combination; but as a matter of fact much more foreign than native acid is used in this country now, the imports from abroad being from 1,200 to 1,500 tons per annum, while it is not believed that the English output amounts to more than half that quantity. The English manufacturers work directly from lees.

AMMONIA SALTS.—*Sal ammoniac*: firm at 35s. to 37s. for first and second quality lump respectively. *Carbonate*: steady at 3½d. *Sulphate*: rather firmer since the beginning of the week; Beckton 11l. 12s. 6d.; good grey, 11l. 8s. 9d. to 11l. 10s.; Hull, 11l. 6s. 3d. to 11l. 7s. 6d.; Leith, 11l. 6s. 3d.

BALSAM (PERUVIAN).—Very firm. Business was done in "unworked" balsam at 4s. 6d. per lb. last week, and for good worked 4s. 9d. per lb. would now probably be the lowest price.

BENZOL.—Very firmly held, 90-per-cent. at 3s. 11d. to 4s., and 50-per-cent., 2s. 10d. to 2s. 11d.

BUCHU.—Good green round leaves are still held for very high prices. The last Cape steamer only brought 2 bales.

CALABAR BEANS.—Small sales at 6d. per lb. are reported from Liverpool, where further arrivals have taken place.

CAMPHOR (CRUDE).—The market remains firm, and we hear of a few small sales of *Japan* on the spot at 160s.

CAMPHOR (REFINED).—*English* bells unaltered at 2s. per lb. from the makers, and very little available in second-hand. *German* offers at 1s. 7½d. per lb. net. Telegrams from Hamburg report an advance since Tuesday of about 1d. per lb., the quotation being now 345m. against 330m. two days ago.

CINCHONA.—Tuesday's bark sales were among the smallest held here during the last few years. They were composed of:—

	Packages	Packages
Ceylon bark	613 of which	593 were sold
East Indian bark ..	137 "	123 "
Java bark	94 "	94 "
South American bark	550 "	106 "
Total	1,429 "	916 "

The assortment of barks was rather inferior, and there were no particularly attractive parcels. Considering the proximity of the holiday week, and the unimportant character of the sales, there was a very good competition, and nearly the whole of the East Indian barks sold at very firm prices, and occasionally at a slight advance, holders being by no means disposed to give way. We place the average unit at fully 1½d. per lb. The following are the approximate quantities purchased by the principal buyers:—

	Lbs.
Agents for the Mannheim and Amsterdam works ..	102,316
" Pelletier factory	23,210
" Frankfort o/M. and Stuttgart works ..	25,243
" Brunswick factory	20,971
Mr. Thomas Whiffen	14,586
Messrs. Howards & Sons	11,313
Agents for the Auerbach works	6,554
" American and Italian works	4,831
Sundry druggists, &c.	4,272
Total quantity sold	218,296
Bought in or withdrawn	75,048
Total weight of bark offered	293,344

It should be well understood that the mere weight of bark purchased affords no guide whatever to the quinine yield represented by it, firms who buy a small quantity of bark by weight frequently taking the richest lots, and *vice versa*. An analysis of the catalogues gives the following prices for sound bark:—

CEYLON BARK.—*Original.*—Red varieties: Fair to good bright but dusty chips, 2d. to 2½d.; good strong to bright quilly mixed chips, 2½d. to 3½d.; pale woody shavings, 2½d.; good bright but small shavings, 2½d. to 3d.; ordinary dust, 2d.; dull dark and dusty to good bright bold root, 2d. to 5d. per lb. Grey varieties: Ordinary dark to fair strong quilly chips, 3d. to 4d.; good small shavings, 3½d.; bold but woody to fair root, 4½d. to 5½d. per lb. Yellow: Good bright to fine strong quilly chips, 5d. to 7½d. per lb. *Renewed.*—Red varieties: A large quantity of dull weak to good quilly bright chips, 2½d. to 4½d.; ordinary weak and woody shavings, 3d. to 4d.; fine bright strong ditto, 6d. to 7d. per lb. Dusty and small mixed to good bold quilly grey chips, 4½d. to 7d.; dull yellow stem chips, 5d. per lb.

EAST INDIAN BARK.—*Original.*—Red varieties: Ordinary dull branch chips, 1½d.; fair to fine bright quilly chips, 2½d. to 4½d. per lb. Small but good strong quilly grey chips, 4d. to 4½d.; ordinary small yellow chips, 3d.; low quillings, 2½d.; fair shavings, 5d. per lb. Hybrid small dark shavings, 3d. per lb. *Renewed.*—Red varieties: Fair branch chips, 4d. to 5d.; good small mixed bright quilly chips, 6d. per lb. Grey varieties: Fair to strong bold chips, 5½d. to 6d.; good but small shavings, 5½d. per lb. Yellow chips: Rather small and dull, 7d. to 8d.; dull shavings, 7½d. per lb. Hybrid dull and low mixed shavings, 2½d.; fair but dusty ditto, 6½d. per lb.

JAVA BARK.—Red: Chips, 3d. to 3½d. per lb. Grey: Fair chips, 5d.; dusty root, 5d. per lb. Yellow: Fair branch chips, 4½d. to 5d.; strong bold chips, 8d.; very dusty root, 7d. per lb.

SOUTH AMERICAN BARK.—Of 368 packages cultivated

Bolivian *Calisaya* bark, 103 bales (11,203 lbs.) sold at 9½d. to 10½d. for fair to good stout bold silvery quill, and 7d. to 7½d. for smaller or less rich quill; good bold chips realised 5½d. per lb. For 112 packages *Cuprea*, offers of 2d. to 2½d. per lb. were refused, and 70 serons old *Soft Columbian* bark were also bought in.

The following are the exports of cinchona from Java for the eleven months ending May 31:—

	1889-90	1888-9	1887-8	1886-7
	Amst. lbs.	lbs.	lbs.	lbs.
Govt. plantations ..	475,693	723,491	575,983	622,793
Private ..	4,221,042	3,124,354	2,553,210	1,431,245
Total ..	4,696,741	3,847,845	3,139,196	2,054,035

The Ceylon exports from January 1 to July 3 have been: 1890, 4,229,329 lbs.; 1889, 4,933,965 lbs.; 1888, 6,295,555 lbs.; 1887, 6,641,744 lbs.

COCHINEAL.—Business is very slight, but small sales are reported at from 9½d. for fair black up to 1s. per lb. for good silver Teneriffe.

COPPER (SULPHATE).—Quiet, and obtainable at 17l. 10s. to 18l. on the spot.

CREAM OF TARTAR.—Crystals dull, and showing a declining market; best white French now obtainable at 100s.

CUTCH.—The market is quiet and no sales are reported, except a transaction of 500 cases, *Bull* mark, at 30s. 6d. per cwt., in Liverpool. At auction 380 boxes "*Engine*" in slabs were bought in at a nominal price. The shipments of cutch from Rangoon to all parts between January 1 and July 12 were:—1890, 9,350 tons; 1889, 12,310 tons; 1888, 13,100 tons.

GUM ARABIC.—Exceedingly quiet, but there is rather more demand privately for *Ghatti*.

IPECACUANHA.—Early in the week fair quality sold up to 6s. 8d. and 6s. 10d. per lb., but since then 7s. has been paid, and one of the two owners, it is said, declines to sell any more at the price.

ISINGLASS.—At the periodical auctions held on Tuesday the supply was small—viz., only 313 packages. A strong demand prevailed for nearly all varieties, and higher prices ruled. *West Indian* descriptions were from 1d. to 2d., fine *Pará* 2d. to 3d., lump 1d., *Saigon* leaf about 2d.; *Penang* and *Bombay* leaf also decidedly dearer.

KOLA NUTS.—Sales have been made in Liverpool, it is said, up to 1s. 2d. per lb. for good dry quality.

MUSK.—We hear that the demand still remains good, and that some better prices have been paid for finest thin blue skin first pile *Tonquin* pods—namely, 86s per oz.

OIL (CASTOR).—The London market is very quiet. In Liverpool good *Calcutta* seconds are held for 4½d. per lb., and *Madras* for 3½d. to 4d. per lb. First pressure *French* oil has sold at 3½d. per lb. Mail reports from *Calcutta*, dated July 8, say that the arrivals of castor seed were on the increase, the oil being consequently somewhat lower in price.

OILS (ESSENTIAL).—*Star-anise* oil is said to have been sold on the spot at 6s. 4½d. per lb., but there are some parcels still offering at the old quotation of 6s. 4d. per lb. *Tonquin* star-anise oil is selling at 5s. 10½d. per lb., "c.i.f." terms. Oil of *Cinnamon* is reported firm. We understand that the proprietors of the well-known "*Cannaverenne, B in diamond*" brand, have ceased to manufacture any oil. As the reason of this is given that the combination existing among the Ceylon cinnamon growers for the purpose of stopping the cutting of cinnamon chips renders the manufacture of the oil difficult, as the cinnamon bark is too expensive to be used for distilling purposes. American oil of *Peppermint* (H.G.H.) is held for 11s. 6d. per lb. Italian essences are again from 2d. to 3d. per lb. dearer for *Bergamot* and *Lemon*. Japanese oil of *Peppermint* also dearer at 4s. to 4s. 3d. per lb., according to quality. From Ceylon, oils of *Citronella* and *Lemongrass* are both reported to be rising in value. The former is now quoted here at ¾d. per oz. on the spot, which is the lowest price, while the "c.i.f." quotation for prompt shipment is 11d. per lb. *Lemongrass* is held for 1¾d. per oz. on the spot for good native brands, offers of 1¾d. per oz. having been declined. The "c.i.f." price for this oil is 1½d. per oz.

OPIMUM.—The London market is quite stagnant, and telegrams from Smyrna announce a slightly easier turn there. The American buyers are holding off, and, so far as is at present known, the Dutch Company also have not made any purchases yet. It seems likely that if the trade should continue to stand off awhile the Smyrna market is bound to give way.

POTASH SALTS.—*Bichromate* very steady at 3¾d. per lb. *Carbonate* scarce and dear, 90 to 92-per-cent., 19s. 6d. c.i.f. *Chlorate* firmly held at 5d. *Permanganate* unaltered at the prices quoted last week. *Yellow prussiate*, in the manufacture of which English makers are very busy, 9½d. per lb. *Acetate*, 15l. 10s.

QUASSIA WOOD slightly firmer. Sales of good logs have been made this week at 4l. 15s. per ton, and subsequently at 5l. per ton.

QUICKSILVER.—The importers still ask 10l. 10s. per bottle, but the market is easier, and there are second-hand sellers at 10l. 1s.

QUININE.—There has been some revival of speculation in this article, and the price of second-hand German in bulk closes about ½d. per oz. higher, about 60,000 oz. to 70,000 oz. being reported sold at the following prices:—*B & S* or *Brunswick* at 12½d., rising to 12¾d. per oz. (a transaction at 12¾d. per oz. is also spoken of), and *Whiffen's* at 13¼d. per oz.

SENEGA.—Good bright root may still be had for 1s. 10d. per lb. here, but we hear that in America prices are advancing.

SHELLAC.—The market this week opened very flat, and prices receded daily. At the auctions on Tuesday 1,256 cases were offered, of which 500 sold, with a very moderate demand, at a decline of about 2s. per cwt. on *Second Orange* as compared with the preceding auctions. Unworked, fine pale curly, brought 94s. to 96s.; rather dull and reddish, 87s. to 89s.; livery to good reddish worked, 89s. to 91s. *Button*: Steady; worked seconds, rather dark, 102s. 6d. per cwt. Since the auctions the market has again declined; but to-day a rally of from 6d. to 1s. on yesterday's quotations occurred, and about 700 cases TN orange sold for delivery at the following prices:—August, 92s.; September, 93s.; October, 94s.; and December, 95s. 6d. per cwt. Mail reports from *Calcutta*, dated July 8, describe the sticklac market as in a very excited state, and say that everything that comes forward is eagerly bought up at high prices. Shellac makers are very firm, and the demand for button lac is very strong, but stocks of this description are exceedingly small.

SODA SALTS.—*Bicarbonate*, in kegs, from 6l. 5s. to 6l. 10s. ex warehouse. *Bichromate*, 2¾d. per lb. *Crystals* dearer, and it is doubtful whether 68s. would still buy, 65s. being now asked ex warehouse. *Crustic*, 70-per-cent. on the spot dearer, at 10l. 10s. *Nitrate* also firm at 8s. 4½d. to 8s. 10½d., according to quality. *Sulphate* (Glauber salts) obtainable at 35s. per ton.

STICKLAC dearer. It is said that 100 cases fine *Siam* lac changed hands late last week at 70s. per cwt.

TONQUIN BEANS.—We hear that heavy arrivals of *Angostura* beans have just been received in New York, and that prices are likely to decline in consequence.

TURMERIC.—Steady. For fine bright *Madras* finger 16s. 9d. to 17s. per cwt. has been paid. *Cochin* neglected. Split bulbs nominally 9s. per cwt. Good Bengal has sold up to 13s. 6d. and 14s. per cwt. for small quantities.

CHEMICALS IN THE NORTH OF ENGLAND.

THE MARKET FOR HEAVY CHEMICALS, with the exception of *Sulphate of copper*, continues very firm, with a fair amount of business doing. Prices on the whole are steady, and makers are not disposed to accept anything under market quotations.

THERE is no further news to report about the Chemical Union. Negotiations are still going on, and makers are

satisfied with the progress being made. The adverse criticism of one London daily paper on the formation of the Union has not in the least depressed the manufacturers, and the favourable article in another London daily has fully restored whatever confidence they might have lost in the scheme.

BICARBONATE OF SODA—Market firm at 5*l.* 15*s.* per ton, less 2½ per cent. discount, packed in 1-cwt. kegs, f.o.b. Liverpool, prompt delivery, and usual allowances for larger packages.

BLEACHING-POWDER.—Steadier, and little variation in price, 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* per ton, on rails Widnes and St. Helens, in softwood casks, and 5*l.* 15*s.* to 5*l.* 17*s.* 6*d.* per ton f.o.b. Liverpool, in hardwood casks, less 2½ per cent. discount, with considerable inquiry for forward, but unable to get quotations beyond September. Glasgow quotations, 5*l.* 7*s.* 6*d.* to 5*l.* 12*s.* 6*d.* per ton on rails. Tyne market firm and steady at 5*l.* 7*s.* 6*d.* to 5*l.* 10*s.* per ton for prompt delivery, and in softwood casks. For forward to end of September makers ask 5*l.* 15*s.* to 6*l.* per ton, according to brand. For delivery in hardwood casks, 5*s.* per ton extra. Prices ex ship Thames, 5*l.* 17*s.* 6*d.* to 6*l.* per ton.

CAUSTIC SODA continues very firm, and market bare for immediate delivery. For prompt and forward deliveries to end of September prices are 8*l.* 17*s.* 6*d.* to 9*l.* per ton for 60-per-cent. white; 9*l.* 17*s.* 6*d.* to 10*l.* per ton for 70-per-cent.; and 10*l.* 15*s.* to 10*l.* 17*s.* 6*d.* per ton for 74-per-cent., less 2½ per cent. discount. Newcastle market steady at 10*l.* 10*s.* per ton for 77-per-cent., and 13*l.* 10*s.* per ton, ground and packed in 3-4-cwt. barrels, both net cash, f.o.b. Tyne.

CHLORATE OF POTASH.—Firm, and makers asking 5*l.* per lb., less 5 per cent. discount, at usual ports of shipment, Liverpool, Glasgow, and Newcastle.

CREAM CAUSTIC.—Firm, at prices ranging from 8*l.* to 8*l.* 10*s.* on rails Widnes and St. Helens, and 8*l.* 5*s.* to 8*l.* 15*s.* per ton, f.o.b. Liverpool, less 2½ per cent. discount.

HYPOSULPHITE OF SODA.—In excellent demand at 5*l.* 5*s.* per ton in casks, and 5*l.* 15*s.* per ton in kegs, less 2½ per cent. discount, f.o.b. Tyne; and 6*l.* per ton in casks, and 6*l.* 10*s.* per ton in kegs, delivered Liverpool and Manchester, both less 2½ per cent. discount.

SODA ASH is again dearer in the Tyne district, owing to increasing orders coming in for export. Carbonated quoted 1½*d.* per degree, less 5 per cent. discount, f.o.b. Tyne. Liverpool market firm at 1½*d.* per degree for caustic, and 1½*d.* to 1½*d.* per degree for carbonated, f.o.b. Liverpool, less 2½ per cent. discount.

SODA CRYSTALS keep steady in price and in good demand. Quotations are 3*l.* per ton on rails, and 3*l.* 5*s.* per ton, net weight, f.o.b. Liverpool, packed in 3-cwt. barrels, less 2½ per cent. discount; 2*l.* 13*s.* 6*d.* to 2*l.* 15*s.* per ton, in casks, gross weight; 2*l.* 15*s.* per ton in 2-cwt. bags, net weight; 2*l.* 17*s.* 6*d.* per ton in 1-cwt. bags, net weight, f.o.b. Tyne, net cash. For delivery ex ship Thames, 3*l.* to 3*l.* 1*s.* 6*d.* per ton, in casks, gross weight.

SULPHATE OF COPPER.—Market flat, and not much doing, and prices tending downwards; 18*l.* to 18*l.* 10*s.* per ton, less 5 per cent. discount, for prompt. For early months of next year 19*l.* per ton quoted, but less would probably be accepted.

SULPHATE OF SODA.—Quiet for prompt, but no reduction in price. Makers ask 32*s.* 6*d.* per ton in bulk on rails, Widnes and St. Helens. Good inquiry for forward, but none offering. Newcastle market quiet at 30*s.* per ton in bulk and 42*s.* per ton ground and packed in casks for export shipment, f.o.b. Tyne.

THE REVISION OF RAILWAY RATES.

THE table of maximum rates and charges and classification of merchandise traffic, issued late last week from the Board of Trade office, contains the following points of interest to the drug and chemical trades, in addition to those already specified in our editorial note of July 26.

The following is the rule laid down by the Board of Trade with regard to smalls:—

CARRIAGE OF SMALL PARCELS BY MERCHANDISE TRAINS.

1. For the carriage of small parcels, not exceeding in weight 3 cwt., the company may charge, in addition to the maximum rates for conveyance, and the maximum station and service terminals, authorised in respect of Classes 1 to 5 of the classification, which rates and charges are in this part together referred to by the expression "the maximum tonnage charge," the following:—

Authorised additional charge per parcel		Per ton		Per ton
s. d.		s. d.		s. d.
0 6	When the maximum tonnage charge does not exceed	10 0	.. ..	..
0 8		10 0		20 0
0 10		20 0		30 0
1 0		30 0		40 0
1 2		40 0	but does not exceed	50 0
1 4	When the maximum tonnage charge exceeds	50 0		60 0
1 6		60 0		70 0
1 8		70 0		80 0
1 10		80 0		90 0
2 0		90 0		..

2. Where, for a small parcel exceeding in weight 3 cwt., the maximum tonnage charge comes to less than the company are authorised, according to the above table, to charge for a parcel of 3 cwt. in weight, the company may charge for such parcel as if its weight was 3 cwt. and no more.

3. For a small parcel of less than 28 lbs. in weight the company may charge as for a parcel of 28 lbs. in weight.

4. For a fraction of 14 lbs. in weight the company may charge as for 14 lbs. weight.

5. Any small parcel (other than a parcel of mixed groceries) containing articles belonging to different classes of the classification, shall be chargeable with the maximum tonnage charge applicable to the highest of the classes.

6. If the consignor of a small parcel declines, on demand by the company, to declare to the company the nature of the contents of the small parcel before or at the time when the same is delivered to the company for conveyance, the company may charge for the parcel as if it was wholly composed of articles comprised in Class 5 of the classification.

It will be seen from these provisions that the traders have scored a considerable victory in this section. The value of the concession, so far as the drug trade is concerned, becomes manifest when we compare the new rule with the paragraph in which the druggists' sub-committee stated their objections to the companies' demands. The objections were, that inasmuch as three-fourths of druggists' consignments are under 560 lbs. in weight, the cost of carriage on the bulk of their trade would be doubled if the companies' demand for permission to charge double rates for "smalls"—i.e., packages under 560 lbs. weight—were conceded. They demanded that the weight for "smalls" should be left at 500 lbs., as in the former scale, but they did not press their objection to the increase to 5 cwt. They also objected to the proposal to charge fractions of 5 cwt. as 5 cwt., and they further suggested that instead of double rates a sliding scale should be adopted for "smalls," increasing the rate of carriage in inverse ratio to the weight of the parcel. In the classification of drugs and chemicals several alterations have also been made by the Board of Trade in favour of the traders; a large number of articles having been reduced to a lower class than that claimed by the companies. The Board of Trade have reduced to Class A (applicable to consignments of 4 tons and upwards): "einders, coal," from Class B. Kainit and sulphate of potash are reduced from Class C to Class B. The following reductions have been made from Class I to Class C: arseniate of soda, bisulphite of soda, eutch, dividivi, dyewoods—barwood, lima-wood, fustic-wood, logwood, Nicaragua-wood, gambier, and terra japonica, myrabolams, and shumac. The following have been reduced from Class 2 into Class 1: carbonate of ammonia, in casks or iron drums; carbonate of potash, in casks; sal-ammoniac; while gluc has been reduced from Class 3 to Class 1. The reductions made from Class 3 to Class 2 are: argols or tartars; beeswax and glycerine, in casks or iron drums. From Class 4 to Class 3: gelatine and oils, not dangerous, except otherwise provided. From Class 5 to Class 4 there is no reduction.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive *nom-de-plume*.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

Shop Hours.

SIR,—Why couldn't "Non-conventional" write in his own name instead of using a *nom de plume*? If he had, very likely the three other chemists in his town might have something to say on the other side. Especially should he have done so when he uses such terms as in the first part of his last paragraph, apparently because everyone is not of his way of thinking.

Passing over the mountain-and-mole-hill business, which is merely a matter of opinion, I maintain that what I have stated has nothing imaginary about it, but consists of facts; and his remedy of shutting-up at a stated time would go for nothing with me, as my customers would simply go to the next shop, where they would find the master or the assistant on hand; and I am not likely, as a man of business, to allow my customers to do that when I should be at my post. Some of them might stick. I don't find customers to be so obliging when they want anything urgently as to wait for my return; and the few shillings lost thereby are of some importance to me, if they are not to "N.C."; and with regard to doctors' bills, I never had occasion to pay any for myself during thirty-three years' active work in the trade, and am not quite played out yet I hope.

With regard to my friend Evans' plan, he hasn't shown me quite so easily as he imagines how to close early. It isn't a matter of confidence in each other at all, and I shouldn't dream of adopting either of his plans, although I know him to be a most obliging and liberal-minded man towards his *confrères*.

I must ask my numerous friends in the trade to take Mr. Evans' statement with regard to my joviality *cum grano salis*. I hope I haven't carried into my maturer years the frisky ways of my youth! and, with regard to his statement that I posed as a martyr, I wasn't aware of the fact myself, and shouldn't have written to you on the subject at all, but for the circumstance of your article on "Shop Hours" appearing at the same time when the agitation on the subject was going on here; but I fail to see where the easy and profitable terms he speaks of come in. The martyrs appear to be on the other side, as the grievance seems to be that those who don't see their way to do it decline to shut. But, after all, as I have said before, where is the necessity for those who keep assistants to shut when they can arrange for holidays without doing so? They haven't answered that argument. For the single-handed man there is the option of shutting-up and going out, and seeing his business go to those who shut up but keep their assistants or themselves on the premises, and shutting-up and keeping in yourself, which is simply a farce; and I don't intend to adopt either of them.

Yours faithfully,

Teignmouth, July 26.

JNO. E. RYDER.

Manchester Pharmaceutical Association.

SIR,—As the individual of superlative activity referred to in your note *re* the Manchester Pharmaceutical Association on Saturday last, it would ill-become me if I did not, in

simple justice to others who have for years laboured actively and disinterestedly for the success of our local association and for the advancement of pharmacy, disclaim any right to be singled out for special notice. That I do take an interest in the well-being of our association, and in the general well-doing of "the body politic," I am proud to own, still there are others—I wish there were more—who have the cause at heart equally as much; but it would be invidious to name them. Respecting the "hole-and-corner" statement, I will satisfy myself by saying that, so far as I know, it is not in accordance with truth.

With your permission, Mr. Editor, I would like to add something to my disclaimer, and, although intending my remarks more especially for the benefit of the fraternity hereabouts, I think, judging by what I hear, that they may be usefully applied by the brotherhood elsewhere. There are those who work and those who do nothing. Those who will work may work while the rest sit waiting to be helped, and not only want their food prepared but require to be humoured and petted or they will not partake of it then. The "providers" have worked well in the past, but if they have failed to satisfy all tastes it is only the every-day experience of all caterers. As men grow older they cannot be expected to throw as much vigour into their work as they did, and 'tis the duty of the young and vigorous to relieve them of a deal of the work, at the same time availing themselves of the experience begot of long service. It will be a long time before chemists obtain all they are rightfully entitled to, but that time will be immeasurably prolonged if the individuals keep aloof from the struggle.

I am hoping that our association will shortly afford the "trade" an opportunity of discussing a "new Pharmacy Bill," and I trust the "trade" will be sufficiently alive to its best interests to loyally back any efforts that may be made to remedy "a crying evil." Let the young men, and those of maturer age, cast in their lot, and let us see if something cannot be done to win back our legitimate rights. We shall value their counsel most, though we shall not despise their subscriptions.

Yours faithfully,

254 Stretford Road, Manchester.

H. KEMP.

The Extra Spirit Duty.

SIR,—About two months ago I was instructed by the Nottingham and Notts Chemists' Association to call the attention of our local members of Parliament to the vexatious manner in which the increased spirit duty was affecting our trade. I therefore wrote to the following members:—Arnold Morley, Esq., J. S. Wright, Esq., H. Broadhurst, Esq., and, on the suggestion of the latter, to Sir Walter Foster.

Their replies agreed in substance with that of Mr. Picton, published in your columns last week, and my object in writing is to point out to those who should think of acting on the suggestion in Mr. Edwards' letter that it is evidently too late for anything to be done in the matter now. We must grin and bear it until the Budget proposals are under consideration next year, when, should the Government intend continuing the extra duty, a strong attempt should be made to obtain exemption for spirit used for medicinal purposes.

Yours truly,

Nottingham, July 29.

WILLIAM GILL.

Hop Substitutes.

SIR,—An article upon the above has appeared in your Summer number, page 111, so I now ask of you space in your valuable journal for a few remarks upon the same.

In the paper referred to as read before the Society of Public Analysts, Mr. Adams states "that boiling a 2½-per-cent. decoction of hop with a 2½-per-cent. sulphuric acid under a reflux condenser for two or three hours, every trace of bitter is entirely removed; but quassia and its allies are not at all affected by this treatment."

I have no hesitation whatever in flatly contradicting the statement that "quassia and its allies are not at all affected by that treatment." They are, on the contrary, very much affected by such treatment.

If a solution of quassia (B.P. strength) be boiled with 2½ per cent. of sulphuric acid under a reflux condenser from five to ten hours, the sulphuric acid then completely pre-

precipitated with barium hydrate, filtered, and the excess of barium hydrate contained in the filtrate precipitated by carbonic acid, filtered, and the filtrate boiled to its original bulk, it will be found that practically all the original bitterness has been removed or destroyed without ever subjecting it to the lead-acetate process. Under these circumstances the process is worthless; nay, more than that, it is erroneous and misleading.

13 Fish Street Hill, E.C., Yours truly,
July 28. WILLIAM JOHNSTONE.

Pil. Ferri (Blaud).

SIR,—Nothing has been written in the journal on the above subject that I have noticed for a long time. The last hints were from Denmark and Australia, if I recollect aright.

Since then I have made the pills with the greatest satisfaction by using as an excipient equal portions of glycerine and glucose. They keep for weeks on an open tray without losing shape, becoming hard, or developing fer. carb. rub. After months' keeping the change apparent is that they get softer and almost black in colour.

I think this subject is worthy of more close investigation than I have been able to pay to it. I hope some of your readers may take it up.

I am, yours &c.,
Arbroath, July 24. D. HAITLY BURN.

Manchester Pharmacy Schools.

Writing in reference to a paragraph in our last issue which stated that there are three "schools of pharmacy" in Manchester, Mr. Spencer Turner asks us to notice that there is only one "Manchester College of Pharmacy," that is the one of which he is director.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

A. Hypophosphite Mixture.

SIR,—I have had the following to dispense:—

Liq. ferri hypophosph.	..	..	..	3jss.
Liq. sodii arsenat.	..	..	..	40m.
Tr. nucis vom.	..	..	..	3j.
Syr. aurant.	..	..	..	j.
Aq. ad	..	..	..	3vi.

Ft. mist. 3ss. c. aq. t.d.

Customer has had it elsewhere always clear, mine is turbid. Can any reader suggest the cause of difference? I may mention that I used Fletcher's liquor ferri hyp.

H. F. W. D. (97/47.)

[Liq. ferri hypophosphitis becomes ferric somewhat quickly, and would form a turbid mixture, unless ac. phosph. dil. had been added to it. But fresh liquor does not give a precipitate. If your customer prefers a clear mixture, you will get over the difficulty by adding ac. phosph. dil. 3j. to it. Distilled water must, of course, be used.]

Lanoline and Glycerine in Ointments.

SIR,—The following prescription (written by a physician) was handed to me to be dispensed:—

Acid. carbol. liquefact.	..	..	..	3ss.
Sulph. precip.	..	..	..	3ij.
Pulv. acid. borici	..	..	..	3j.
Morph. acet.	..	..	..	gr. xx.
Glycerin. pur.	..	..	..	3ij.
Lanolini, ad	..	..	..	3j.

M. Ft. ung., et sig. m. d. utend.

I found that upon adding the glycerine all the liquid portion separated out. I adopted these three methods, each giving the same result. The hydrous lanoline was used for all.

(a.) The powders first rubbed down with the lanoline and the liquids added last.

(b.) The carbolic acid first incorporated.

(c.) The glycerine first incorporated.

I finally sent it out with the liquid drained off on filtering-paper, of a nice consistence, but of course with a partial—if not complete—loss of some of the ingredients.

Yours truly,

PENRYMON. (92/66.)

[Mix the dry powders, add ac. carbolic. liq., melt at a gentle heat the lanoline with the glycerine, then add to the other ingredients. Use a warm mortar. By thus mixing a nice inseparable ointment is obtained. You were not justified in sending it out as you did.—ED. C. & D.]

LEGAL QUERIES.

101/43. *Dextrine*.—There is nothing in the Veterinary Act to prevent anyone prescribing for animals. The unregistered assistants of a veterinary surgeon may carry on his practice, provided they do not take or use any name, title, &c., which implies that they are practitioners of veterinary surgery. If, for instance, they call themselves "A. and B. successors to C., veterinary surgeon," they would be liable under the Act.

101/66. *M. P. S. I.*—It would be illegal to sell methylated friar's balsam under any title, unless the express permission of the Board of Inland Revenue had been given.

100/69. *Naphthaline*.—It is legal for a chemist to sell poisonous fly-papers to a grocer. Whether it is legal for the grocer to sell them again is another matter.

101/60. *H. J. N.*—There is nothing illegal in your calling yourself a doubly qualified chemist if you are such. If you are, besides being a qualified British chemist, a pharmaceutical chemist of Ireland, it would seem that you ought to be at liberty to exhibit the certificates. But the 12th section of the Pharmacy Act, 1852, says it shall not be lawful for anyone not registered under that Act to assume or use the title of pharmaceutical chemist in any part of Great Britain. The Pharmaceutical Society of Great Britain could therefore probably prevent the Irish certificate being used in any form in this country.

MISCELLANEOUS INQUIRIES.

94/36. *Sir Mon.*—The only way you can Destroy Black-birds other than shooting is by poisoning, and for that you would require to ensure absence of all domestic animals or fowls. Besides, it is not legal to lay poisoned grain about. But why so hard on the blackbirds? They have done their work amongst the grubs and worms, and are only paying themselves for work done. Wholesale destruction of their nests at the breeding season would keep them down a bit.

93/29. *W. H. B.*—To Bleach Hair white, that has become yellow through smoking (?), we can think of nothing better than to persevere in using peroxide of hydrogen and alkaline washes.

94/33. *Pig.*—(1) Your Pig-powder appears to consist of fenugreek coarsely powdered. It is extensively used in some districts. Dose, a teaspoonful or more, according to size of the pig. (2) All students, subscribers to the journal, or employed by such, are eligible for the "Students' Corner."

94/53. *Ventilation*.—If at the end of eleven months, after fumigation, chloride of lime, carbolic acid, re-painting, re-papering, and repeated scouring, the smell of that cat still persists, the only thing left for you to do is to take up the flooring, and have it thoroughly cleaned and deodorised underneath with creolin or green vitriol. Are you sure the remains of the cat may not be either under the floor or behind the fireplace?

A. G.—To preserve your **Cochineal Colouring** add to each pint about 3 oz. spirit or glycerine in place of part of the water, or use chloroform water.

96/33. *Ajax*.—To **Scent Programmes** for theatre use, place filter-paper, or some absorbent material, in the bottom of a box having a closely-fitting lid, sprinkle the essence over it, then loosely a layer of cotton-wool, place the programmes on the top, and keep covered as long as possible. Any good essence or extract will suit.

92/26. *J. D. (Paris)*.—**Roche's Embrocation** is imitated by the following formula:—

Olei olivaram	3ij.
Ol. succini rect.	3j.
Ol. caryoph.	5i.
Ol. limonis	5i.

We cannot undertake to give "exact information regarding the composition" of this or of any proprietary preparations.

22/93. *Calumba*.—**Salol** is a phenyl ether of salicylic acid—in other words, salicylate of phenol, $C_6H_5.C_6H_4O_3$, or $C_6H_4(OH)COO.C_6H_5$.

14 93. *Jack*.—The specific for drunkenness is a mixture of aromatics and a bitter; the exact nature is not ascertainable by analysis, but ginger, capsicum, liquorice, and gentian appear to be ingredients.

97/1. *S. A. B.*—(1) To **Powder Asafoetida** use a warm mortar. This is a very old "wrinkle." (2) **Raspberry Syrup**.—Raspberry vinegar, 10 oz; sugar, 17½ oz. Dissolve by the aid of heat.

97 22. *Orewin* makes an essence of **Coffæ** which is apt to get mouldy round the cork when kept for a few months. He does not state whether inside or outside the bottle. We presume the former. Glycerine of horax is used as a preservative. We suggest the addition of a little chloroform, and filling the essence into bottles which have been warmed for an hour in an oven and not allowed to get cold.

96 61. *Liander*.—You may impart a perfume similar to heliotrope to hard paraffin by adding to it a sufficiency of a mixture of oil of bitter almonds, 4 parts; oil of verbena, 2 parts; otto of rose, 1 part; and oil of neroli, 1 part.

96/70. *Anxious* is to come up to London to **Study** for the **Minor** in January next, and he wants to know what he should read before then. Now that flowers are blooming everywhere, he should not neglect the opportunity to read botany, especially comparing all flowers with the types given in text-books; but all parts of plants are in fine condition at present for examination, and well repay careful study. Bentley's "Structural and Morphological Botany" is a suitable text-book. "Anxious" should read a little theoretical chemistry, say from Roscoe's "Elementary Lessons"; but while the student is behind the counter he should above all endeavour to master his Pharmacopœia. It is the knowledge of this which determines the qualifications of a pharmacist, and it is nowhere better studied than during the everyday work of the pharmacy. Endeavour to systematise the study of the book. Squire's "Companion" is of great assistance in this. Learn from it, for example, the source, &c., of drugs, and thereby master the preliminary work of *materia medica*. Then arrange the galenical preparations in groups, learning by heart their constituents, and proportions of the active constituents. Doses should also be learnt, especially those which are given in "The Art of Dispensing." Also ascertain the chemical properties of the chemical substances, more especially the bases, such as potassium, iron and mercury, and the acids, such as acetic, hydrochloric, and sulphuric. Roscoe's book will be of great assistance here. A conscientious endeavour to master the fundamental prin-

ciples of the Pharmacopœia will take the student upon the best course of reading which he can follow, and meanwhile his dispensing practice will compel him to resort to "The Art of Dispensing" and Pereira's "Selecta" for assistance in reading and compounding prescriptions.

96/64. *R. W. Broomfield*.—For information as to **The Art of Mixing Paints**, consult "The Artist's Manual of Pigments" (Crosby, Lockwood & Co. 2s. 6d.).

92 18. *G.*—(1) The **Arabic for Foot** is "kadam"; for powder, "suful" or "turab." (2) **Helix** for electric light. It will be more profitable for you to get an electrical engineer to make you what you want, than to attempt making it for yourself.

97/59. *J. R.*—The name you mention is not on the register.

93 53. *E. L.* has some old **Damson Wine** which he wishes to clarify; it is clear, but not bright. He has tried gelatine and filtration without effect; can any fellow-pharmacist help him? [Did he use the gelatine in solution, with the addition of either tartaric or acetic acid? If so, the way he is most likely to succeed is by adding chalk (or kaolin), shaking up occasionally for a day or two, then leaving at rest for some time before decanting.]

Frank English.—To **Filter Acid Glycerine of Pepsine**, use a felt bag same as for syrups; moisten first with water. Have you tried powdered glass to clarify?

101/36. *J. T. D.*—Boiled.

101/34. *Turtar*.—(1.) **Castell Evans's "Experimental Chemistry"** is published by Thomas Murby, 3 Ludgate Circus Buildings, Farringdon Street, E.C. (2.) **Wills's "Materia Medica"** is suitable for the Major, or "Pharmacographia."

29/93. *Sweet William*.—We do not have time to diagnose flowers for students; moreover, replies to correspondents must be of general interest.

98/73. *A. M.*—The **Edinburgh University** has not declared that it will accept the Pharmaceutical Preliminary examination in lieu of its Matriculation examination; but a registered medical student has only to pass one or two extra subjects (Logic and Greek, we think) so that one may get allowance from the medical registrar for the Pharmaceutical Preliminary, *pro tanto*, and take the rest of the subjects at the Educational Institute of Scotland, whose examination qualifies for registration as a medical student.

9/93. *Spero*.—Putty-powder alone, or mixed with precipitated chalk, is used for **Polishing the Finger-nails**.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

93/8.—"Powd. alepoc" has occurred in a prescription, and the drug has been supplied by a provincial wholesale house. What is it?

93/34.—Best composition for bicycle-lamp oil.

93/43. Formula for confect. sulphur co. (Rukes).

93/70. Makers of litho'd and punched-out pictures of animals, &c., for advertising purposes.

THE MODEL NORDLAND FISHING BOAT

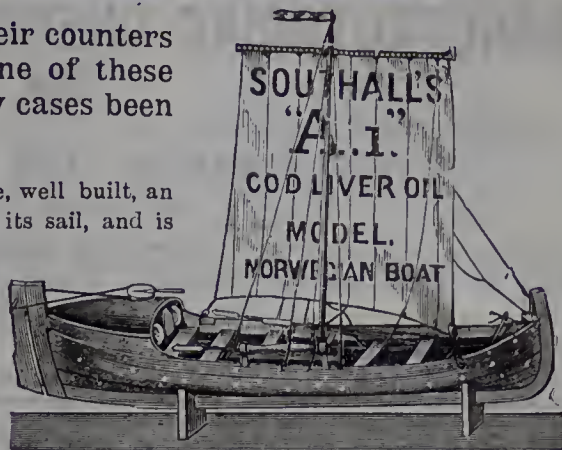
Those who wish to make a display of the Oil on their counters or in their windows are recommended to obtain one of these unique and beautiful models, which have in so many cases been found useful in increasing the sale of the Oil.

These Models, made specially for us in Norway, are very picturesque, well built, and behave admirably in water. Each boat possesses oars, in addition to its sail, and is complete in every respect. It is also fitted with a cabin on deck, as used by the fishermen in travelling from their homes to the fishing ground. They measure 28 inches from stem to stern, and 32 inches to top of mast.

The Boats are intended for the interior of shops and windows as an attraction and advertisement, and are only supplied to purchasers of the "A 1" Oil; the price fixed is very moderate—namely 10/- each.

For the convenience of Chemists, and to secure the "A 1" COD LIVER OIL being placed in the hands of the Public perfectly sweet, we have packed it in 8-oz. and 16-oz. green flint oval and flat bottles, at the LOWEST POSSIBLE PRICE.

The bottles are sent out either without labels of any kind, or with the blue trade mark labels over the cork, and are either plain or capsuled. The corks are of best quality, and the bottles are packed in boxes with divisions specially made for the purpose, which are charged, but full prices are allowed when returned in good condition. It will be obvious that by bottling from the original casks, which have not been opened since they left the factory in Norway, the Oil in these small bottles must be in the most perfect condition.



PRICES FOR THE HOME TRADE ONLY.

In Dispensing Bottles—containing 8 oz. fluid	By 6-doz. case. 12-doz. case. 24-doz. case.		
	- - 6/3	6/	5/9 doz. to a/c.
" 16 oz. "	By 3-doz. case. 6-doz. case. 12-doz. case.		
	- - 11/6	11/3	11/ "

CARRIAGE FREE.

N.B.—If less than these quantities are ordered, carriage must be paid by the Customer, unless the order is made up to the value of £5 with drugs.

SOUTHALL BROS. & BARCLAY, BIRMINGHAM.

The BEST and CHEAPEST BEVERAGE

IN EXISTENCE IS

VAN HOUTEN'S COCOA

RICH YET DIGESTIBLE

STIMULATING YET SUSTAINING

SAVING WHAT OTHER PROCESSES WASTE

DEVELOPING THE

DELICIOUS FLAVOUR & AROMA

AND FORMING A

DRINK FOR A PRINCE

AT LESS THAN A FARTHING A CUP.

LOFTHOUSE & SALTMER, MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUG MERCHANTS, HULL,

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles. Quotations on Application

DEALERS IN PURE CHEMICALS

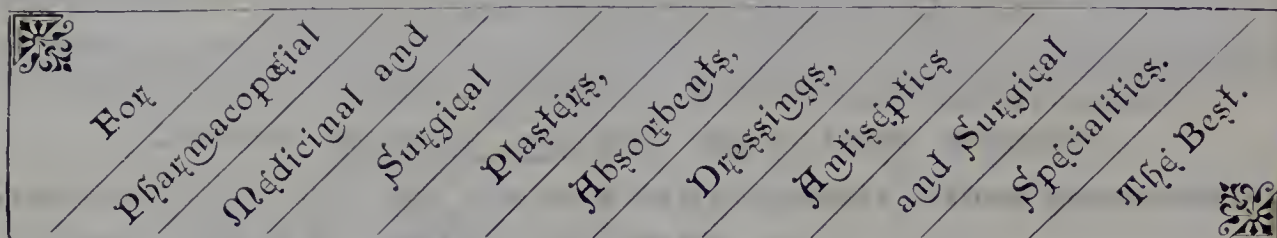
For Medicinal, Photographic, and Commercial purposes.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable Quotations can be given on application.

43 HIGHEST AWARDS OVER ALL COMPETITORS THROUGHOUT THE WORLD.

Seabury Pharmacal Laboratories, New York and London.



SEABURY & JOHNSON, MANUFACTURING CHEMISTS,
46 JEWIN ST., LONDON, E.C.; 21 PLATT ST., NEW YORK. PARIS and HAMBURG.

ALOIN,

THE ACTIVE PRINCIPLE OF ALOES,
MANUFACTURED BY THE DISCOVERERS—
T. & H. SMITH & CO., EDINBURGH AND LONDON.

"The uniformity in strength of Aloin, the smallness of its dose, and the certainty of its action, should commend it to the favourable consideration of all medical practitioners."—*Vide* Dr. Wm. Craig's investigations respecting our Aloin, published in the *Edinburgh Medical Journal* for May 1875.

Edinburgh Address—21 Duke St. London Address—12 Worship St., E.C.

New York Office—20 Cedar Street; FRA^S. JA^S. MACNAUGHTAN, Agent. [3]

C. R. HARKER, STAGG & MORGAN

WHOLESALE & EXPORT DRUGGISTS

MANUFACTURING CHEMISTS

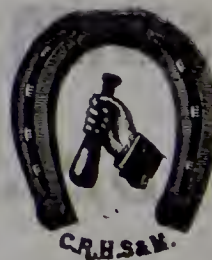
IMPORTERS & DISTILLERS of ESSENTIAL OILS

PHARMACEUTICAL EXTRACTS—FLUID AND SOLID.

STANDARDIZED AND GUARANTEED DRUGS AND PREPARATIONS.

15 LAURENCE POUNTNEY LANE, & ARTHUR ST. WEST, LONDON, E.C.

REGISTERED ADDRESS FOR TELEGRAMS—"EDULCINE LONDON." Telephone No. 1949.



Branch House: HOPKIN & WILLIAMS, 16 CROSS ST., HATTON GARDEN, LONDON, E.C.



Established
1798



Howards & Sons

QUININE, CINCHONA ALKALOIDS,

Acetates of Soda & Potash.
Acids, pure.
Æthers, pure & methylated.
Antimony preparations.
Benzoic Acid & Benzoates.
Bicarbonate of Potash.
Bicarbonate of Soda (Howards').
Bismuth preparations.
Borax & Boracic Acid.
Bromides of the Alkalies.
Caffeine.
Caffeine Citrate, P.B.
Camphor Bells, Blocks, & Flowers.
Citrate of Iron & Quinine, P.B.

Citric Acid & Citrates.
Cocaine and its Salts.
Corrosive Sublimate.
Ext. Cinch. Liq. P.B., & H. & S.
Ext. Cocæ Liq. P.B.
Iodides of the Alkalies.
Iodoform.
Liq. Bismuthi et Am. Citratis.
Magnesia.
Mercurials, Calomel, &c., &c.
Rochelle Salt & Pulv. Seidlitz.
Spirit preparations.
Terebene.
Urethane. &c., &c.

AND OTHER PHARMACEUTICAL CHEMICALS.

Stratford, Essex.



Detailed Price Lists on application.

Schacht's Preparations.

SCHACHT'S LIQUOR BISMUTHI.

Absolutely pure. The original preparation, invented and introduced to medicine by Mr. Schacht in 1855. Its distinct superiority is universally admitted. In $\frac{1}{2}$ lb., 1 lb., 2 lb., and 5 lb. bottles. Dose: 1 drachm diluted. When ordering, please to specify "SCHACHT'S."

SCHACHT'S LIQ. BISMUTHI SEDATIVUS.

Contains pure Bismuth and *Pepsina Liquida* in combination with sedatives. A formula most serviceable in the treatment of gastric pain. In 4 oz., $\frac{1}{2}$ lb., and 1 lb. bottles.

SCHACHT'S SYR. CINCHONÆ ALCOHOLICUS.

A standard preparation, of definite alkaloidal strength, containing the entire medicinal properties of the finest Cinchona Bark. It is, in fact, *Bark minus the woody fibre*, and its efficiency has been proved by careful medical enquiry. Dose: Ten to sixty drops.

SCHACHT'S PEPSINA LIQUIDA (REGISTERED TITLE).

Fluid pepsine of extraordinary activity—tasteless, odourless, attractive to patients, and reasonable in price. Every teaspoonful when tested by the official B.P. process is *guaranteed* to effect the solution of 1,000 grains of albumen. Peptic power is the only test of value. Most of the foetid and repulsive dry Pepsines have proved worthless. In 4 oz. bottles, 2s. 6d. each; and larger sizes for dispensing at a cheaper rate.

SCHACHT'S PEPSINA LIQUIDA C. BISMUTHO.

Each drachm contains in a concentrated form, besides the fluid pepsine, a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In $\frac{1}{2}$ lb. and 1 lb. bottles.

N.B.—*Peps. Liq. c. Bismutho Co.* contains, in addition, one gr. soluble Euonymin in each drachm.

SCHACHT'S PEPSINA LIQUIDA C. EUONYMIN.

Each drachm contains one grain of soluble Euonymin. Dose: One drachm. For dispensing $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S LIQ. PODOPHYLLI C. BISMUTHO.

A perfect solution of Podophyllin, containing $\frac{1}{2}$ gr. in each drachm.

SCHACHT'S LIQUOR CASCARÆ DULCIS.

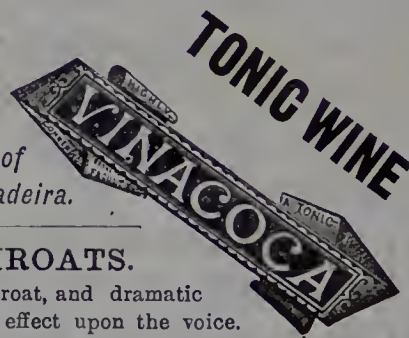
A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz., $\frac{1}{2}$ lb. and 1 lb. bottles.

SCHACHT'S INFALLIBLE RENNET.

An entirely new Essence, perfectly reliable, for the coagulation of Milk, and the production of Junkets and Curds and Whey. It is a preparation of the most wholesome nature, that *contains no salt*, and has no special taste, smell, or colour. In large bottles at 1s. of all Chemists. This Essence keeps well in any climate.

The above Preparations can be procured from Messrs. Barclay & Sons, W. Edwards & Son, and the Wholesale Druggists; or direct by post from

GILES, SCHACHT & Co., Clifton, Bristol.



Embracing the Therapeutic Properties of
the Cocoa Plant, blended with the best Madeira.

COCA FOR TROUBLESOME THROATS.

Testimony is not wanting from specialists in diseases of the throat, and dramatic and lyric artists, to show that coca has a wonderfully invigorating effect upon the voice.

The preparation in most common use is the wine of coca which, in order to yield the characteristic effect, must be made "upon honour." To be of any decided value it must be made from the coca leaves. Very much of the coca wine on the market is merely a solution of cocaine, which cannot be too severely condemned. Hence, those with troublesome throats who desire to use this tonic should be exceedingly careful in purchasing, patronising dealers only of known reliability.

The VINACOCA is carefully prepared from the best Coca Leaf only. (No addition of Cocaine.)

Medical men prescribe its use in preference to Quinine or any Bark Wine. It may be used with safety at all times, and for any length of time, without injury to the gastric membrane. It may be taken in place of Liquors and Dessert Wines, which it certainly surpasses in flavour. It is a *direct stimulant of the most active kind*, supporting life in a manner almost miraculous, without disturbance of the vital functions. For the voice, a wineglassful before any ordeal is sufficient. Its effect upon the vocal cords is surprising, and of great value to Public Speakers, Professional and other Singers, and Lecturers.

Sold in Bottles at 3/6 each, or 40/- per dozen, Retail.

THE FRENCH HYGIENIC SOCIETY, 6 CONDUIT STREET, REGENT STREET, LONDON, W.

WYLEYS & CO.

MANUFACTURING CHEMISTS

AND

DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,
COVENTRY.

CITRATE OF MAGNESIA.

A good reliable quality, in 1-cwt. tins per cwt. 68/-

Or in 4-lb. or 7-lb. bottles „ 70/-

Extra Quality, containing an additional amount of Citric Acid... .. per lb. 11d.

Superior Grades at $1/2$ and $1/4$ per lb.

EFFERVESCENT SALINE (CHLORATED).

Price $1/2$ lb.

A PERFECTLY DRY AND FINE POWDER.

The above may also be had with 5 per cent. extra Sulphate of Magnesia at same price if ordered as

EFFERVESCENT SALINE APERIENT.

RASPBERRY CITRATE.

Price 1/- lb.

A thoroughly satisfactory make of this now popular article.

ALSO:

LEMON CITRATE,

Price 1/- per lb.

LIME FRUIT CITRATE,

Price 1/- per lb.

DESCRIPTIVE LABELS (without name), 8d. per 100.

R. W. GREEFF & CO.

AGENTS FOR

RIEDEL'S PHARMACEUTICAL SPECIALITIES

SULFONAL

(RIEDEL).

This Preparation has the great advantage over other brands of being absolutely pure, melting at 258° F. Further, it is notably more bulky than other makes, and is therefore more easily and quickly dissolved and absorbed than compact and hard crystals.

PHENACETIN

(RIEDEL).

Has a melting point of 275° F., which is the most important proof of its purity; there being several impure preparations in commerce.

THIOL

(RIEDEL).

A substitute for Ichthyol, is COMPLETELY INODOROUS, readily Soluble in Water, and may be mixed with Ointment in any proportion.

DR. HENRY BYK'S PURE CHEMICALS.

ACID. BENZOIC. E TOLUOLO.

Almost odourless.

ACID. BENZOIC. E RESINA.

Guaranteed to be sublimed from and retaining the fragrance of Gm. Benjamin.

ACID. GALLIC. CRYST. CHEM. PURE

Perfectly white needles.

ACID. PYROGALLIC BISUBLIMED.

Professor Dr. Vogel says:—" light snowy white and carefully prepared article—DISSOLVING COMPLETELY and quickly in water or alcohol."

Professor Dr. J. M. Eder says:—"Dr. Byk's Pyrogallie Acid is exceedingly light and bulky . . . as good an Acid as can be produced."

This is the lightest, and consequently purest Pyro in the trade.

ACID. TANNIC.

Purest quality, powdered and granulated. Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. For medicine and finest work in art.

ACID. TANNIC LEVISSIMA PUREST

Dissolves colourless in water, alcohol, and ether, free from resinous and colouring matter. Used for similar purposes as the chemically pure powder.

AMMONIUM BROMIDE.

CHLORALHYDRATE.

COFFEINE, PUREST, AND ALL COMPOUNDS.

FERR. LACTIC. POWDER.

GOLD CHLORIDE.

HYDROQUINONE.

DR. BYK'S PERMANENT HYDRO-

QUINONE.

Light yellow crystals. Insensible to moist air and light.

iodoform CRYSTALS.

POTASH BROMIDE CRYST.

POTASH IODIDE CRYST.

POTASH PERMANGANATE CRYST.

RENNET POWDER.

SODIUM BROMIDE.

SODIUM BENZOATE.

SODIUM IODIDE.

R. W. GREEFF & CO. are also Manufacturers' Agents for the following Specialities:—

IRON REDUCED BY HYDROGEN.

ACETANILID.

ACETIC ACID, GLACIAL & P.B.

ACETONE, PURE, 98°

GLYCERINE, 1,260 d.d., &c.

(BEST GERMAN BRANDS).

CASTOR OIL (FRENCH).

MAGNESIA, CARB. AND CALC.

SODA HYPOSULPHITE.

SUGAR OF MILK.

ANILINE COLOURS

(CELEBRATED BERLIN BRANDS).

SOLE WHOLESALE AGENTS:

R. W. GREEFF & CO., 29 MINCHING LANE, **LONDON, E.C.**

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

BEECHAM'S PILLS.



They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, **THOMAS BEECHAM**, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1½d. and 2s. 9d. each, with full instructions for use.

JOHNS'

The Best and Safest Medicine for all Disorders of the Liver and Digestive Organs; also invaluable in all Female Complaints.

Full
Directions
with each Box

LIVER PILLS.

PREPARED AND SOLD BY

W. JOHNS, 6 Wilkes St., LONDON, E.

In Boxes 1s. 1½d. and 2s. 9d. each.

(ESTABLISHED UPWARDS OF 50 YEARS.)

For terms and particulars, apply to the Proprietors—

GUY'S
TONIC COMPANY,
4 Ludgate Circus,
LONDON, E.C.

It may also be obtained from the usual Wholesale Houses.

Guy's Tonic

Guy's Tonic is sold Retail, at 2s. 9d. per bottle.

One size only prepared.

We are co-operating with Chemists and the trade generally, arranging satisfactory terms in return for general enterprise on our behalf.

FREDK. BOEHM,

BILLITER SQUARE BUILDINGS,
LONDON,

Manufacturers' Agent & Importer of the following

CHEMICALS

Acetate of Lead. Permanganate of Potash.

Muriate of Ammonia.

Glycerine. Alcohol. Ethers. Chloroform. Acetanilide.

Boracic, Lactic, Tannic, Tartaric Acids.

Hypo-Soda. Oxalate of Potash. Hydroquinone.

PRICE LIST ON APPLICATION.

PURE TARTAR EMETIC.

PURE OXIDE OF ANTIMONY.

Showing 98 per cent. of anhydrous Sb₂O₃.

This product is obtained BY A NEW PROCESS, and is offered at VERY ADVANTAGEOUS PRICES.

POULENC FRÈRES,

92 Rue Vieille du Temple, PARIS.

Grand Prize, Universal Exhibition, Paris, 1889.

MOONSEED PILLS,



Moonseed ∴ Bitters.

MOONSEED OINTMENT,

MOONSEED ANTIOBESE,

AND

MOONSEED BITTERS

Can be had of most of the Wholesale Houses,

WHO WILL OBTAIN SUPPLIES OF

MESSRS. EDWARDS, 157 Queen Victoria Street, LONDON, E.C.

All Retailers of Moonseed Preparations must sign our contract not to cut the prices of our goods.

Applications should be made to the Wholesale Houses for Form of Agreement. Any Wholesale House not being able to supply our Form of Agreement cannot supply our Preparations except at a high price, which is not remunerative to the Retailer.

Sole Proprietors, and originators of the non-cut and starvation system,

A. E. POWELL & CO., SWINDON.

HALF A CENTURY OF SUCCESS

THE ONLY GENUINE MINT ALCOHOL IS

DE RICQLES'

MINT ALCOHOL.

Recommended by the highest Medical Authority for Indigestion, Stomach Ache, Heartburn, and Headache. It dispels immediately all uncomfortable feeling. Indispensable during the hot weather. An excellent article for the Toilet and Teeth. A grand Preservative during periods of Epidemics.

53 AWARDS, of which 15 are Diplomas of Honour & 14 Gold Medals DEPOSITS EVERYWHERE.

Manufactory:—Lyons (France), 9 Cours d'Herbouville
PARIS, 41 rue Richer.

Insist on the name De Ricqlès.

PURE CARBONATE OF LITHIA.

and all other Lithia Salts.

MERCURIALS

Calomel, Corrosive Sublimate, Oxides, &c.

IODOFORM

Chloral, Terpene, Osmic Acid, Tannin, Tartar Emetic

LIQUID CHLORIDE OF METHYL, for the treatment of Rheumatism, Neuralgia, &c.

GRAND PRIX, PARIS EXHIBITION, 1889.

Wholesale from FURST BROS., 17 Philip Lane, London, E.C.

Sole Agents for BILLAULT, Rue Sorbonne, PARIS.

N.B.—Stock of the above kept in London.

The Handelsgesellschaft

(COMMERCIAL COMPANY)

NORIS ZAHN & CO., Nuremberg, GERMANY,

Keeps the largest and most profitable Stock of Specialities in Germany. The Company is in constant communication with more than 400 Pharmaceutical Establishments, and makes a speciality of the introduction of new remedies by medical practitioners and pharmacists. Its efforts in this direction have been highly successful, and the best references can be furnished.

EXPORT AND IMPORT DEPARTMENT. [2]

Firms desiring to introduce their Preparations into Germany are requested to honour N. Z. & Co. with their correspondence.

TO IMPORTERS OF GERMAN GOODS!

Before buying elsewhere, please apply to us for our Price List of German Medicinal, Pharmaceutical, Dietetic, and Hygienic Preparations. Better terms may be secured by purchasing through our firm than by going directly to the producers. We also offer the additional advantage of executing orders for small quantities at reduced prices.

HANDELSGESELLSCHAFT NORIS ZAHN & CO.
NUREMBERG, GERMANY.

CORRESPONDENCE IN ENGLISH, FRENCH, ITALIAN, &c., &c.

DURBAN, NATAL.

THE NATAL DRUG CO., LD.

(Late Bentley & Vanderpump),

**WHOLESALE DRUGGISTS,
IMPORTERS, AND MANUFACTURING CHEMISTS.**

AGENCIES undertaken for the Sale of
PROPRIETARY ARTICLES, and other Goods suited to the
SOUTH AFRICAN MARKETS.

LONDON AGENTS:

DAVIS & SOPER, Bury Street, St. Mary-Axe, LONDON.

Telegraphic Address—"REPOSNO LONDON."

DURBAN, NATAL.

HAWLEY'S COUNTER ADJUNCTS. MILK OF ROSES.

A mild and pleasant application for the skin, rendering it soft and smooth. In 1-oz. and 3-oz. W. (i. panelled flasks with pretty fancy label, suitable for Chemist's name and address.

Gd., 3s. 3d.; 6 dozen, 3s.; 1s. 6s. 6d.; 6 dozen, 6s.

STRENGTHENING WASH FOR THE HAIR.

For some years past we have been selling the above as an article retailing at 1s. 6d. We have lately decided to offer it in 1s. and 6d. sizes, and have taken the present opportunity of much improving the style of label, which is now very effective. It is a cleansing, refreshing, and agreeably perfumed Hair Wash, containing Quinine and sufficient Cantharides to stimulate the hair follicles and the scalp. In 2-oz., 4-oz., and 6-oz. panelled flasks, retailing at 6d., 1s., and 1s. 6d. with label suitable for name and address.

PRICE.—6d., 4s.; 6 dozen, 3. 9d. per dozen. 1s., 7s. 6d.; 6 dozen, 7s. per dozen. 1s. 6d., 10s.; 6 dozen, 9s. 6d. per dozen.



HAIR DYE.

After a series of experiments as to proportions, &c., we have succeeded in producing a really good and effective Hair Dye. It consists of separate perfumed solutions of Nitrate of Silver and Pyrogallie Acid.

In two 1½-oz. flasks, with directions. In neat Card Cases, provided with fancy label suitable for Chemist's name and address.

PRICE.—Retail. 1s. 6d., 12s.; 6 dozen, 11s. 6d. per dozen.

N.B.—An open space being left before the words *Hair Dye*, any name can be given, as "Military," or "Naval," or "Aristocratic," &c.; and when chosen, such name would be kept as the Chemist's own right in a town.

EVANS, LESCHER & WEBB,
60 BARTHOLOMEW CLOSE, LONDON.

LIVERPOOL:

MONTREAL:

EVANS, SONS & CO.

EVANS AND SONS (LIM.)

DINNEFORD'S FLUID MAGNESIA



PERFECT IN PURITY AND UNIFORM IN STRENGTH.

The most efficacious antacid and mild
aperient for Delicate Constitutions,
Ladies, Children, and Infants.

OF ALL WHOLESALE DRUGGISTS

ANTI-STIFF

Is now having a Large Sale by Cycle
Agents in all parts of the Country,

And can be obtained from most Wholesale Patent Medicine
Houses at 8/6 and 4/3 a Dozen, on sale or return, or direct
from the maker as below.

If any Chemist advise me of the fact that he Stocks it (no
matter whence obtained), I will advertise his Name and
Address as an Agent in one or more of the Athletic papers;
this will create him a certain demand for it.

It is USED and RECOMMENDED by HOLBEIN, KEEN,
NETTLETON, and most of the Leading Cyclists.

It is well got up, and makes an ornament to the counter.

JOSEPH WILSON, Chemist, CHISLEHURST.

SANDAL WOOD OIL

SANDAL WOOD OIL is now recognised as one of the most successful specifics in Gonorrhœa, but still some medical men of repute have stated they have not succeeded with it. Can it be wondered at when such rubbish is offered for sale under the name of Sandal Wood Oil?

Qualities of this article are being quoted at prices lower than the cost of the oil existing in the most inferior woods before drawing. How patients are to be pitied who are forced to consume such medicines!!!

~~~~~  
The only way to obtain pure Essential Oils is to buy direct from the Manufacturers,

**W. J. BUSH & CO.**

Drawers of all kinds of Essential Oils,

**ARTILLERY LANE, LONDON.**

WORKS:—*Ash Grove, Hackney; Mitcham, Surrey; Grasse, France; Messina, Sicily.*

*See the opinions of the highest Medical Authorities on "Bush's" Oil Sandal Wood.*



# DR. LALOR'S PHOSPHODYNE



For TWENTY-EIGHT YEARS has maintained its world-wide reputation as

THE ONLY SAFE RELIABLE PHOSPHORIC CURE for Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, Premature Decay of Vital Power, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart Disease.

Cures Kidney and Liver Complaints.

Cures all Blood Disorders.

Cures Consumption and General Debility.

Checks all Wasting of the Vital Forces, from whatever cause arising.

## DR. LALOR'S PHOSPHODYNE

HEALTH, STRENGTH, & ENERGY.

Is the only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition, 1883-4, where all Countries were Exhibitors, and the only Trade Mark—"PHOSPHODYNE"—Registered and Protected under the Trade Marks Act.

THOUSANDS of unimpeachable Testimonials from all parts of the World, and from the highest Medical Authorities, prove conclusively the Verdict Universal that in the World of scientific research no other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Sold in bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

MANUFACTURED ONLY AT

DR. LALOR'S PHOSPHODYNE  
LABORATORY,  
HAMPSTEAD, LONDON, N.W.



**TOMBAREL FRÈRES,**  
GRASSE,  
Alpes Maritimes,  
FRANCE.

## ESSENTIAL OILS & FLOWER POMADES

EXTRACTS AND PERFUMED OILS,

Orange, Rose, and Elder Flower Water,

## ALMOND & OLIVE OILS,

And Special Products for Manufacturing Perfumers and Toilet Soap Makers.

PRICE LIST ON APPLICATION.

DEPOTS:—

LONDON: HOVENDEN & SONS, PARIS: J. LAMBERT, NEW YORK: A. STILLWELL,  
91 City Road, E.C. Rue St. Martin 95. 103 William Street.

**METHYLENE,**

*Obtained by the action of Metallic Zinc on Chloroform and Alcohol.*  
Discovered to be a general Anæsthetic by Dr. RICHARDSON in 1887.

Bottles, 16s.; 8-oz., 8s. 6d.; 4-oz., 4s. 6d.; 2-oz., 2s. 6d.

**COMPOUND ANÆSTHETIC ETHER,**

*For producing Local Anæsthesia.*  
In 4-oz., 10-oz., and 20-oz. Stopped Bottles, 2s., 4s., and 7s.

**OZONIC ETHER.**

In 2-oz., 4-oz., 8-oz., and 16-oz. Stopped Bottles, 2s., 4s. 6d., 7s., and 10s.

**PEROXIDE OF HYDROGEN.**

*First introduced as a Medicine by Dr. RICHARDSON.*

**ETHYLATE OF SODIUM**

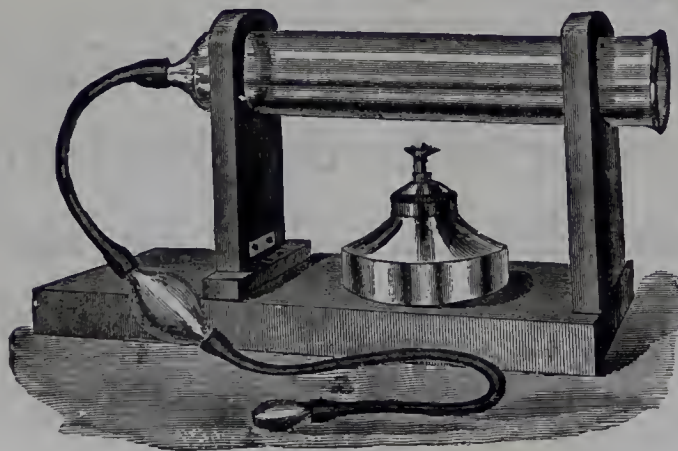
Dr. RICHARDSON'S Formula, for removing Nævi, &c. In 1-oz. & 1-oz. Bottles, with elongated Stoppers for applying the Ointment, 2s. 6d. & 4s. 6d.

**STYPTIC COLLOID,**

*For promoting the Healing of Wounds by the first time it is used.*  
In 2-oz. and 4-oz. Bottles, with Brush, 3s. 6d. and 4s. 6d.; 16-oz., 12s.

**CHARCOAL CAPSULES**

Containing Pure Vegetable Ivory Charcoal.  
In Boxes, 2s. 6d. each.



## MAXWELL'S CHLORIDE OF AMMONIUM INHALER.

The simplest Apparatus yet introduced to the profession.  
Requires no strong caustic or acid liquids.  
Fumes are invariably neutral.

To be had of all Chemists and Sundriesmen, and of the Proprietors—

**ANDERSON & ADAMS**

68 GRAFTON STREET, DUBLIN.

LYNCH & CO., London Agents.

PATENT.

"FOR THE BLOOD IS THE LIFE."

# CLARKE'S WORLD FAMED BLOOD MIXTURE, THE GREAT BLOOD PURIFIER AND RESTORER.

(Trade Mark—"BLOOD MIXTURE," Registered No. 3275)

The Celebrated CURE FOR Scrofula, Scurvy, Eczema, Blood and Skin Diseases, and Sores of all kinds.

Wholesale of all the Wholesale Houses. Usual terms.

Sole Proprietors, THE LINCOLN & MIDLAND COUNTIES' DRUG COMPANY, LINCOLN.

Counter Bills and Posters, with Name and Address, also Show Cards, on application. Printed matter supplied in any Language for Foreign Agents.  
**CAUTION.**—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Wrappers, &c., or Advertisements, or in any way infringing their rights.



# J. & J. SCHOENFELD FRÈRES,

## INDIARUBBER MANUFACTURERS,

### 68 FAUBOURG ST. MARTIN, PARIS. WORKS—AUX QUATRE CHEMINS, PANTIN

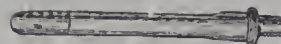
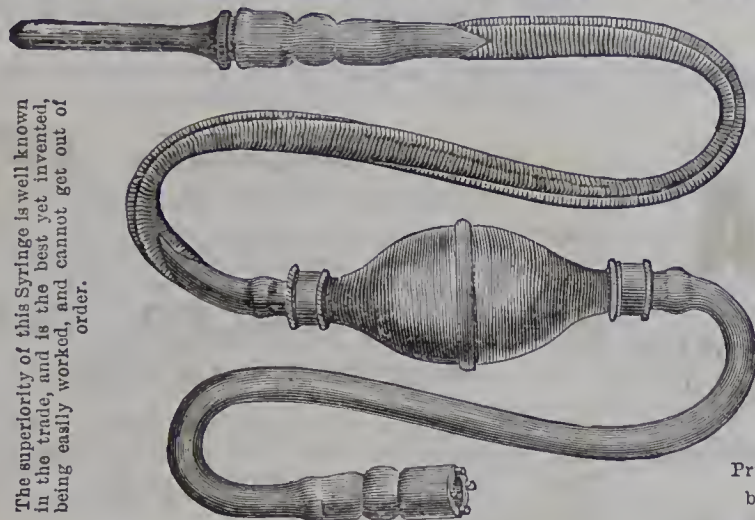
Manufacturers of all kinds of Indiarubber Goods for Surgical purposes, Enemas, Syringes, Teats and Tubing for Feeding Bottles, &c. Prices on application.

SOLE MANUFACTURERS OF

## THE 'ALPHA' CONTINUOUS-FLOW SYRINGE (PATENTED.)

The famous Continuous-flow Syringe.

The superiority of this Syringe is well known in the trade, and is the best yet invented, being easily worked, and cannot get out of order.



The famous Continuous-flow Syringe.

Prices and all particulars sent on application. To be had from all principal Chemists and Druggists.

Sole Agent—G. V. DE LUCA, 6 & 7 Long Lane, Aldersgate Street, LONDON, E.C.

## SEABURY'S MUSTARD PLASTERS

ARE THE BEST.

|          |     |     |            |           |              |                  |
|----------|-----|-----|------------|-----------|--------------|------------------|
| On cloth | 100 | 10  | 6          | 3 leaves; | 1            | 5-yard rolls     |
|          | 84/ | 10/ | 6/         | 3/        | 7/           | 10/ 84/ per doz. |
| On paper | 100 | 50  | 10 leaves; | 1 yard    | 5-yard rolls |                  |
|          | 60/ | 30/ | 7/         | 6 in.     | 12 in. wide  |                  |

SEABURY'S Half-strength Mustard Plasters on Paper, 10 leaves in box, 7/ per dozen boxes.

*These Plasters are intended to meet the wants of persons of specially sensitive skins, who cannot endure the activity of full strength.*

SUBJECT TO DISCOUNT. [1]

## SEABURY & JOHNSON,

46 JEWIN STREET, LONDON, E.C.

NEW YORK AND HAMBURG.

Trade Mark.



Registered.

THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,  
12 Pall Mall East, LONDON, S.W.  
SOLE AGENTS FOR DR. WARLDMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomado in vials, 6s.  
HUMAN VACCINE, from healthy children only, microscopically examined and source quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lancet-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small Points, 5s. Tubes, two-thirds full (same as those mentioned above, but without source), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per dozen. Vaccine Ejectors, 1s. 3d. each, including postage. Vaccinations by appointment. P.O.O.'s (including postage, and crossed London and Westminster Bank) with orders, payable to  
EDWARD DARKE Secretary.

Office hours, 10 to 4. Saturdays 10 to 2.

## BAILEY'S PATENT BRUSHES

The Latest Novelty is our

### RUBBER COMPLEXION BRUSH.

PACKED IN A NEAT BOX. Entirely does away with poisonous cosmetics and face-washes. Used in the ordinary daily ablutions, with a little soap, it makes the skin beautifully fresh, soft, and smooth, and effectually eradicates all blemishes, blotches, pimples, &c. Used as a shampoo brush, gentlemen will find it a most useful adjunct to the toilet, as it entirely removes scurf and dandruff. Mothers and nurses will find it invaluable for bathing the delicate skin of infants and children.

### Bailey's New Rubber Teething Ring.

Is perfectly tasteless, and so constructed that the flat-ended teeth serve to expand the skin of the gums, softening the latter, and aiding the coming tooth without irritation.

PRICES.—Bath Brushes, 4s. per dozen; Complexion Brushes, 2s. per dozen; Toilet Brushes, with handles, 8s. and 17s. per dozen; Teeth Brushes, 6s. and 6s. 6d. per dozen; Teething Rings, 3s. 6d. per dozen.

Of all Wholesale Houses, or direct from the Manufacturers,  
DAVID MOSELEY & SONS,  
14 Aldermanbury Avenue,  
London, E.C.;  
Manchester; Glasgow  
Brussels and Paris.



PARIS EXHIBITION, 1889.  
PRIZE MEDAL AWARDED TO



**"SALVO  
PETROLIA"**

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

**"OLEUM DEELINÆ"**

(REGISTERED).

Universally adopted by the Medical Profession  
FOR

**OPHTHALMIA, SCURVY, RINGWORM,  
ECZEMA, SKIN DISEASES,**

FOR  
**EXTERNAL & INTERNAL IRRITATION  
OF EVERY KIND.**

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles  
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

**"EDIBLE SALVO PETROLIA"**

For Public Speakers, Actors, & Singers.  
1s. 6d. per Tube.

The above are Manufactured Solely by the Proprietors,

**THE DEE OIL COMPANY,  
LIMITED.**

Works—SALTNEY, CHESTER.

OFFICES:

**LONDON — 38 LEADENHALL ST., E.C.**

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,

Bristol, Belfast, Barrow-in-Furness, Nottingham,

Paris, Hamburg, &c.

**TRY IT!**

**NONIT  
OIL.**



A new nursery toilet preparation, neatly put up, agreeably perfumed, thoroughly effective.

**SHOW IT!**

NONIT OIL goes freely, and in many districts is becoming one of the most saleable articles chemists can stock.

**SELL IT!**

Bottles, 6d. and 1s. each.

Intending dealers may have sample bottle post free 7d. stamps,  
3 doz. 6d. trial lots, carriage paid, on receipt of P.O. 12s.

**EDWIN FOWLER, Chemist,**  
218 HESSLE ROAD, HULL.

NONIT OIL may be had through Lofthouse & Saltmer, Hull; Raimes & Co., York; Hirst & Brooke, Leeds; Evans, Sons & Co., Liverpool; R. Hovenden & Sons, London; F. Newbery & Son, London; J. Sanger & Sons, London; and most Wholesale Houses.

TRADE MARKS REGISTERED.

1st. "Fowler's Nonit Oil with device." 2nd. Fancy Word, "Nonit."

**IMMENSE SALE.**

**WOODS' ARECA NUT  
TOOTH PASTE,**

As used and recommended by Madame  
Marie Roze, the Prima Donna.

**PRICE, 6d. and 1s. per Pot.**

**CAUTION.—SEE "WOODS, PLYMOUTH,"  
ON EACH POT.**

**WM. RADAM'S MICROBE KILLER.**  
Specially useful in Hot  
and Injurious  
Climates.  
GURES  
ALL  
BLOOD DISEASES.  
Pleasant, Refreshing,  
and Invigorating.  
WHOLESALE WAREHOUSE,  
111 OXFORD STREET,  
LONDON, W.



# PRICE LIST

OF

# SURGICAL TRUSSES

(MATHER'S OWN MAKE).

## INGUINAL—Single. 10 to 40 inches.

|                                                      |                 |
|------------------------------------------------------|-----------------|
| White Roan and Moleskin ... ..                       | 15/- per dozen. |
| Basil and Moleskin ... ..                            | 20/- „          |
| Red or Maroon and Best Moleskin, Doeskin Pads ... .. | 22/- „          |

## INGUINAL—Double.

|                                                      |                 |
|------------------------------------------------------|-----------------|
| White Roan and Moleskin ... ..                       | 26/- per dozen. |
| Basil and Moleskin ... ..                            | 32/- „          |
| Red or Maroon and Best Moleskin, Doeskin Pads ... .. | 38/- „          |

## For FEMORAL HERNIA.

|                                                               |                                                  |
|---------------------------------------------------------------|--------------------------------------------------|
| Basil and Moleskin, Circular ... ..                           | Single, 22/- per dozen ; Double, 38/- per dozen. |
| „ „ Best Quality, with Narrow Steel Band, and made very light | „ 42/- „ 54/- „                                  |

## CIRCULAR—Basil and Moleskin.

|                          |                 |
|--------------------------|-----------------|
| With Sliding Back ... .. | 60/- per dozen. |
|--------------------------|-----------------|

## COLE'S (Expired Patent).

|                         |            |
|-------------------------|------------|
| Best Doeskin Pads... .. | 10/- each. |
|-------------------------|------------|

## SALMON & ODY'S (Expired Patent).

72/- per dozen.

## For SCROTAL HERNIA.

|            |                             |                 |
|------------|-----------------------------|-----------------|
| Single ... | 42/- per dozen ; Double ... | 72/- per dozen. |
|------------|-----------------------------|-----------------|

## COLE'S (Expired Patent).

|                          |          |
|--------------------------|----------|
| Best Doeskin Pads ... .. | 5/- each |
|--------------------------|----------|

## SALMON & ODY'S (Expired Patent).

36/- per dozen.

## MOC MAIN.

|                     |                                       |
|---------------------|---------------------------------------|
| Best Quality ... .. | Single, 6/6 each ; Double, 12/- each. |
|---------------------|---------------------------------------|

## For UMBILICAL HERNIA.

|                                 |           |
|---------------------------------|-----------|
| On Salmon's principle ... ..    | 8/- each. |
| Circular Umbilical Truss ... .. | 3/6 „     |

TERMS :—12½ per cent. discount at One Month ; 10 per cent. Three Months' Current Account.

SPECIAL QUOTATIONS TO WHOLESALE BUYERS.

**WILLIAM MATHER,**  
**DYER ST., HULME, MANCHESTER.**

London Wholesale and Export Agents : Messrs. MACE & HALDANE, 94 Milton Street.



**PUREST**BRAND—  
"S. SERAPHIMOFF,"**OTTO**Distiller & Exporter,  
KEZANLIK, BULGARIASOLE  
CONSIGNEES—**FUERST BROS.**

17 PHILPOT LANE, LONDON, E.C.

Telegrams—"Fuerst London."

Telephone No. 1050.

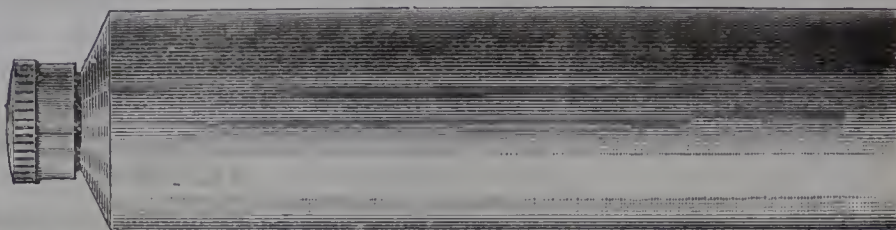
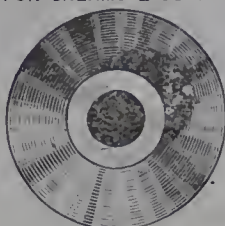
**OF****ROSE.**

[3]

*"Second to none." All buyers desiring absolute purity and guaranteed excellence should write for Samples and Prices.***METALLIC COLLAPSIBLE TUBES FOR PAINTS,**

Perfumes, Shaving Creams, Soaps, Oils, and all Fluid or Semi-Fluid Substances.

FOR CREAMS &amp; SOAPS.

**H. G. SANDERS & SON, Manufacturers,**

Victoria Works, Victoria Gardens, Notting Hill Gate, LONDON, W.

TELEGRAPHIC ADDRESS: "COLLAPSIBLE LONDON."

[3]

ESTABLISHED 1820

**WHITE AND SOUND TEETH.****JEWSBURY & BROWN'S****ORIENTAL TOOTH PASTE.**

This old-established and increasingly favourite Dentifrice has been over Sixty Years before the Public. It is warranted to retain its properties and keep in good condition in any climate. The original and only genuine is manufactured solely by

**JEWSBURY & BROWN, Chemists, MANCHESTER,**

and is distinguishable by the Trade Mark, printed in red and green, a facsimile of which is annexed. Particular attention should be paid to this guarantee of genuineness, as numerous imitations are offered. Sold universally by Chemists and Perfumers, at 1s. 6d. and 2s. 6d.

The Trade and Shippers supplied by the leading houses in London and elsewhere. Bills and Show Cards forwarded on receipt of address cards and directions for enclosure.

**SALVINE.****THE SCIENTIFIC**OF ALL WHOLESALE  
HOUSES.**DENTIFRICE.**

This Preparation has been especially designed by an eminent London Dental Surgeon, after a long series of careful experiments, to Prevent Decay of the Teeth in addition to beautifying them.

**SALVINE** is the only Dentifrice that is an Ant-Acid and Anti-Parasitic. Put up in a novel and attractive manner. Price 1/, 1/6, and 2/6.**LIBERAL TERMS.**

A handsome, valuable Showcard of an exceedingly tasteful and high-class design, now ready. Transparencies and other attractive Advertising matter.

**SALVINE DEPÔT, 3 Oxford St., LONDON, W.****Matchless for the Teeth, Gums, and Breath.****Dr. W. ZIEMER'S**

most efficacious

**"THE ALEXANDRA"****DENTIFRICE.**

It Preserves, Beautifies, and renders the Teeth perfectly White without injuring the enamel. It Strengthens the Gums. It is most Agreeable as a Mouth-wash, and Sweetens the Breath. It is Invaluable to Smokers. Prices: 13 size, 9; 2, size, 15; 36 size, 24 per dozen.

Sole Proprietors: **B. W. ZIEMER & CO.,** 143 Cannon Street, London, E.C.Sold by all  
Wholesale Houses.



## SHIRLEY'S "A1" MENTHOL CONES.

## NEW AND SALEABLE PATTERNS.



No. 34.

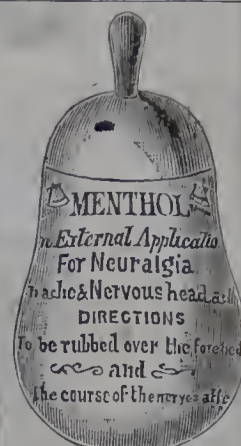
No. 34. — 6d. Apple Shape ... No. 35. — 6d. Pear Shape... 3/9 doz.  
 „ 34L.—1s. „ „ „ 35L.—1s. „ „ 6/6 „  
 Above can be had assorted, 1 doz. in glass-top box, and are very pretty and attractive goods.

## BOXWOODS.

No. 112.—Draughtsman ..... 3/3  
 „ 113.—Cartridge ..... 3/6  
 „ 8P.—6d. Acorn ..... 3/6  
 „ 11L.—1s. „ ..... 6/6  
 „ 17F.—1s. Flat Shape ..... 5/-  
 „ 9CR.—1s. Reversible ..... 5/-



1d. Lines. 3 dozen on Card.  
 No. 110.—Bottle Shape.... 6/6 gross.  
 „ 110v.—Vase „ .... 7/- „  
 „ 110a.—Reversible Shape 7/- „  
 „ 110pv.—Pedestal „ 7/- „  
 2d.  
 No. 114.—Varnished Vase.. 16/- gross.  
 „ 114P.— „ Pedestal 16/- „  
 3d.  
 No. 115.—Draughtsman .. 20/- gross.  
 „ 23.—Barrel ..... 20/- „



No. 35.

## SPECIAL QUOTATIONS TO LARGE BUYERS.

## THE BEST 2/6 SPRAY EVER OFFERED TO THE TRADE.

No. 32.—This Spray is in assorted coloured glass, with sprays of grass and flowers thereon, and is fitted with a double black ball, making it altogether a splendid 2/6 line. Price per dozen, 22/-. Please order at once to secure immediate delivery.

No. 4.—Cut-glass Globe, double ball ..... 39/- dozen.  
 „ 30.—Assorted Coloured Glass, double ball, with butterfly and flowers, and gold mount ..... 39/- „  
 „ 19.—Plain Glass, vulcanite mount, double ball ..... 14/- „  
 „ 26.—Moulded Glass, vulcanite mount, double ball, larger ..... 21/- „

A LARGE AND VARIED ASSORTMENT IN STOCK.



## EVERFRESH SALTS.

## INEXHAUSTIBLE READY SCENTED, 2/2 per lb.

Nos. 168-9.—In Cut-glass Watch Bottles ..... 4/- dozen ... 45/- gross.  
 No. 188.—In Peacock Blue Globe Stoppered Bottles 3/9 „ ... 40/- „  
 No. 189.— „ „ „ „ 7/- „ ... 72/- „



Nos. 188-9.



Nos. 168-9.

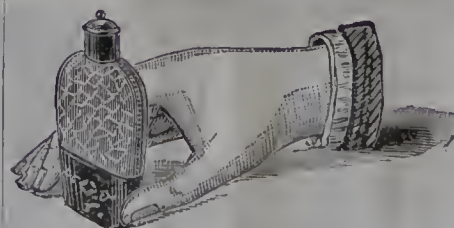
No. 187 is a China Bottle, flask shape, the china being coloured in imitation of Crocodile Leather. It is fitted with a china stopper, silvered over, making a very saleable line.

Filled with "Everfresh" Salts ..... 4/- dozen .. 40/- gross } Empty  
 „ Ammonia and Sponge .... 3/9 „ .. 37/- „ } 3/3 dozen  
 „ „ „ „ „ „ „ „ 32/- gross

In order to assist sales, a China Hand, as per illustration, is given away to buyers of 6 dozen No. 187 Bottle. The hand is holding a sample bottle of No. 187, filled with "Everfresh" Salts, which can be placed on the counter or in the window. These hands could also readily be sold to the public as an ornament to the table or mantelpiece, and to buyers of "Everfresh" Salts would be supplied at 6s. dozen filled, to non-buyers 9s. dozen.



No. 187.



## "A1" FLEXIBLE GELATINE CAPSULES.

Guaranteed to contain Perfectly Pure Drugs.

No. 25. Copaiba Balsam ... 3 doz. in oval box ... 6/- These Goods are well put  
 No. 25A. „ „ „ 1 1/2 „ „ „ 3/6 up and attractively  
 No. 49. English Santal Oil ... 2 „ round „ „ 15/- labelled, and bear no  
 No. 5. Cascara Sagrada ... 2 „ „ „ 8/- name beyond the  
 No. 32. Copaiba, Cubebs, and Matico, 3 „ oval ... 12/- "A1" Trade Mark.

SEND FOR COMPLETE LIST SHOWING STRENGTHS, PRICES LOOSE, &amp;c., &amp;c.



ARTHUR W. SHIRLEY, 55 FARRINGTON ROAD, LONDON, E.C.



# S.V.R., B.P.

We wish to draw the attention of Chemists to the excellence of the spirit we supply for pharmaceutical purposes. We have devoted great care and attention to this branch and have made it a leading line.

That our efforts in this direction have been appreciated is proved by the number of *unsolicited* testimonials we have received from nearly every town in the country, of which the following is a specimen:—

GENTLEMEN,—

The Pharmacy, Morecambe.

Please send 5 gall. 56 o.p. as before. I have pleasure in saying I have always found your spirit answer all tests, which is more than I can say of all I have had from different places, and also to be practically free from odour.

Yours faithfully,

Messrs. Stephen Smith & Co.

JOSH. N. CUTTS, B.Sc., F.C.S.

In consequence of the increase in the spirit duty our prices will be—

S.V.R. 56 o.p. ... 19s. 3d. | Double distilled, 56 o.p. 19s. 7d.

CASH WITH ORDER. REDUCTIONS FOR QUANTITIES.

## SPECIALITY FOR PERFUMERY.

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price 19/10, 56 o.p.; 20/4, 60 o.p. Cash with Order. Reductions for Quantities.

STEPHEN SMITH & CO., BOW, LONDON, E.

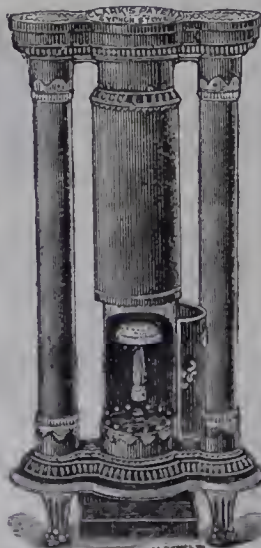
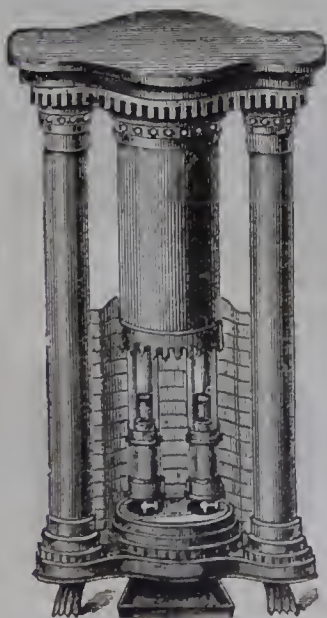
## TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF CLARK'S PATENT

"SYPHON" (REGISTERED TITLE) HYGIENIC CONDENSING GAS HEATING-STOVES.

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

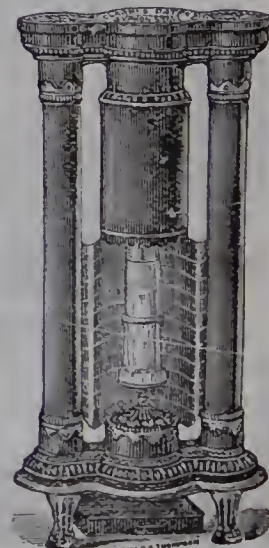
All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.



For Use in Hospitals, Sick Chambers, Bedrooms, Halls, Conservatories, Churches, Schools, &c.

Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

For Terms, Particulars, and Prices, apply to



S. CLARK & CO., Patentees and Makers, Syphon Works, Park Street, ISLINGTON, LONDON, N.

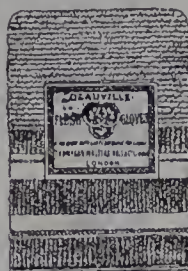
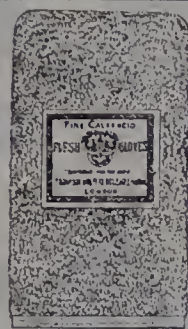
Telegraphic Address—"SYPHON STOVES LONDON."

Wholesale Agents—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.



# FLESH GLOVES.

Before placing your next Order please note the following Prices and Discounts.



| Cat. No. | Gloves.                                                     |
|----------|-------------------------------------------------------------|
| 713      | BRIGHTON, White Honey Comb, stout ... .. per doz. 5/6       |
| 714      | " " " thin ... .. 4/6                                       |
| 715      | " brown " ... .. 5/6                                        |
| 715A     | " " " thin ... .. 1/6                                       |
| 716      | CALEFACIO, coarse or fine ... .. 5/6                        |
| 716A     | " fancy stripe border... .. 2/3                             |
| 717      | DEAUVILLE, brown and white, striped ... .. 4/3              |
| 718      | " brown striped ... .. 4/3                                  |
| 719      | DIEPPE, granite colour ... .. 5/6                           |
| 720      | LOOFAHS AND TURKISH GLOVES, single gloves ... .. 3/6        |
| 721      | SCARBOROUGH, dice pattern, brown and white ... .. 5/6       |
| 721A     | " " fancy colours ... .. 3/9                                |
| 722      | SULTAN, white with red stripes ... .. 6/-                   |
| 723      | TURKISH, thin white, No. 1 ... .. 3/4                       |
| 723A     | " " No. 2 ... .. 2/-                                        |
| 724      | " thick ... .. 4/9                                          |
| 725      | " striped ... .. 3/8                                        |
| 726      | UNION, one side hard brown, the other soft white ... .. 6/3 |
| 727      | VICTORIA, brown, with red and white stripes ... .. 6/3      |
| 727A     | FELL'S Hygienic ... .. 7/6                                  |



## SPECIAL DISCOUNTS AS UNDER:—

7½ % for order of 1 gross.

12½ % for order of 3 gross.

10 % for order of 2 gross.

20 % for order of 5 gross.



MANUFACTURED BY

# THOMPSON, WALTERS, HOLE & CO., LIMITED,

Telegraphic Address—  
"BEATROP LONDON."

CURTAIN ROAD, LONDON, E.C.

Telegraphic Address—  
"BEATROP LONDON."



MANUFACTORY.

"Eclipse" Glass Works,  
Lea Bridge, Clapton, London, E.

Prize Medal, Adelaide Exhibition, 1887.  
Award of Merit, Melbourne, 1888.

OFFICES AND WAREHOUSES:

381-3 KINGSLAND ROAD,  
LONDON, E.

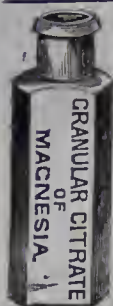
# E. A. HEARN & CO.

WHOLESALE AND EXPORT GLASS BOTTLE MANUFACTURERS.

Makers of EVERY DESCRIPTION of Glass Bottles, either PLAIN or STOPPERED, in  
WHITE FLINT, AMBER, BLUE, MEDICAL GREEN, ACTINIC GREEN, &c., &c.  
OR ANY COLOUR MADE TO ORDER.



FEEDING BOTTLES IN ALL SHAPES,  
PLAIN NECKS OR SCREW STOPPERED.  
SPECIALITY.—First-class Quality at Reasonable Prices.



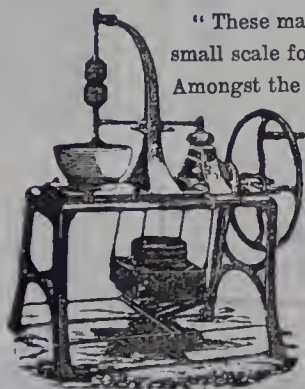
GLASS  
BOTTLES  
OF THE  
BEST QUALITY.

DISPENSING, PICKLE, SAUCE, OIL,  
MINERAL WATERS, &c., &c.  
SAMPLES AND PRICES ON APPLICATION.

E. YOULDON,  
EAST LONDON GLASS BOTTLE WAREHOUSE  
36 to 40 Great Garden Street, Whitechapel,  
LONDON, E.

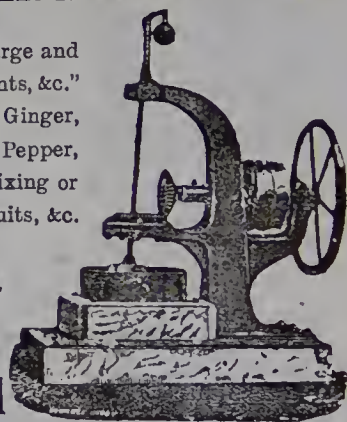


## GOODALL'S PATENT GRINDING & LEVIGATING MACHINES.



"These machines have for many years proved most serviceable on a large and small scale for Grinding, Levigating, and Mixing Powders, Pill Masses, Paints, &c." Amongst the articles which are readily ground by it may be mentioned Ginger, Seeds, Salts of all kinds, Cream of Tartar, Sugar, Cocoa, Pepper, Spice, Jalap, Rhubarb, Gums, Aloes, Barks, &c.; and for mixing or kneading Lozenges, Pill Masses, Glaziers' Putty, Bread, Biscuits, &c.

ILLUSTRATED PRICE LIST, with full particulars, sent free.  
Prices from £8 10s. to £60.



E. F. GOODALL, Barton-under-Needwood

## DUKAS & CO., 20 RED LION SQUARE, LONDON, W.C.



WHOLESALE BRUSH & COMB MANUFACTURERS

(BEST AND CHEAPEST IN EXISTENCE).

ILLUSTRATED LIST OF FANCY BRUSHES.

(100 pages) JUST PUBLISHED, POST FREE ON APPLICATION.

Telegraphic Address—"DUKAS LONDON."

Telephone No. 2747.



## GOVERNMENT DISINFECTANT



CARBOLIC POWDER (PINK) in 1 Cwt. 2 Cwt. CASKS 1lb & 1/2 Packages

CARBOLIC POWDER (PINK) in TINS 6d & 1/-

CARBOLIC SOAP NO 1 & NO 2

CARBOLIC FLUID in 6d 1/4 & 1/6 STOPPERED BOTTLES

CARBOLIC & GLYCERINE SOAP in 1/4 lb 1/2 TABS

FREE FROM POISON  
AGREEABLE IN SMELL

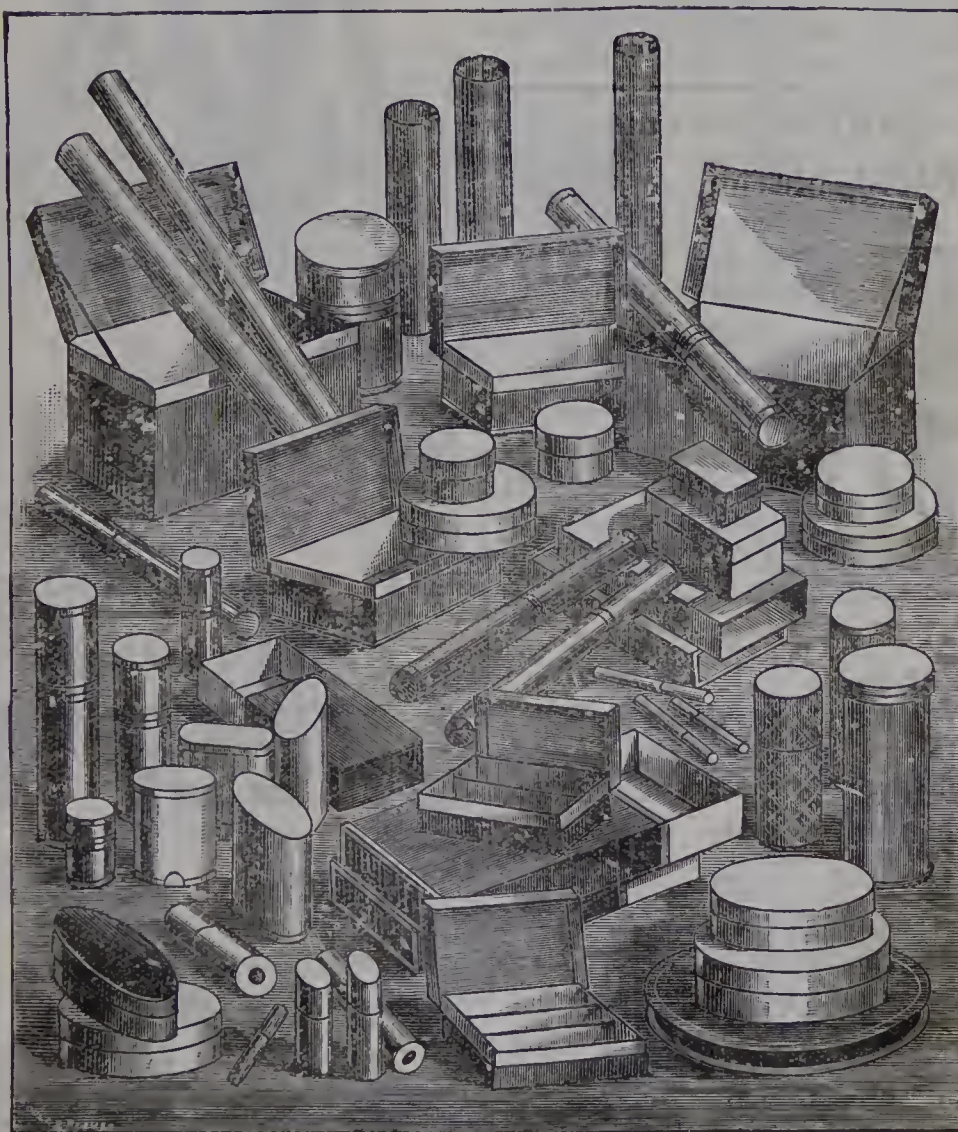
THE GOVERNMENT SANITARY CO.,  
LONDON, E.

TO BE HAD FROM ALL  
WHOLESALE DRUGGISTS



# BOXES FOR

Baking Powder.  
Brushes.  
Bottles.  
Camphor.  
Capsules.  
Cotton Wool.  
Disinfectants.  
Confectionery.  
Essential Oils.  
Perfumery.  
Fancy Soaps.  
Menthol.  
Magnesia.  
Marking Inks.  
Patent Medicines.  
Pills.  
Surgical Instruments.  
Seidlitz Powders.



Sponges.  
Feeding Bottles.  
Starch.  
Tobacco.  
Cigarettes.  
Postal Purposes.  
Coffee.  
Syringes.  
Tooth Stopping.  
Plasters.  
Hair Preps.  
Cosmetiques.  
Photographs.  
Jellies.  
Cement.  
Lozenges.  
Horse Powders  
And  
For Export.

ESTABLISHED OVER HALF A CENTURY.

## Austin & Co.

PATENTEES AND MANUFACTURERS OF

### FANCY CARD & OTHER BOXES, ROUND, OVAL, OR SQUARE.

Office and Warehouse } 8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works—BROAD YARD, TURNMILL STREET.

Send your Sample  
for estimates and  
compare prices.

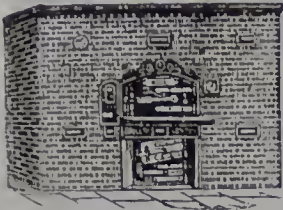
Workmanship  
and Punctuality  
guaranteed.



# JOSEPH BAKER & SONS

58 CITY ROAD, LONDON, E.C.

HIGHEST AWARDS EVER GIVEN. FIFTEEN GOLD MEDALS.  
 Highest Award, London, 1884; Highest Award, Adelaide, 1887;  
 Highest Award, Amsterdam, 1886; Highest Award, Barcelona, 1888;  
 Highest Award, Edinburgh, 1886; Highest Award, Melbourne, 1889  
 HIGHEST AWARD, PARIS, 1889.



The Bailey-Baker Ovens.

Lozenge and Jujube Machinery.  
 Knocding Machines for Pill Masses.  
 Mixing Machines for Emulsions.  
 Mixing Machines for Pomades.  
 Mixing Machines for Chemicals.  
 Mixing Machines for Ointments.  
 Biscuit and Bread Making Machinery.  
 Confectionery Machinery & Ovens.  
 Sifting and Mixing Machines for Powders.  
 Grinding Mills for Sugar.  
 Grinding Mills for Spices, &c.  
 Chocolate and Cocoa Machinery.  
 Melting and Jam Pans.  
 Pill Coaters, Mortars, and Pestles

## ALL SIZES OF GARDNER'S Patent 'RAPID' SIFTERS & MIXERS

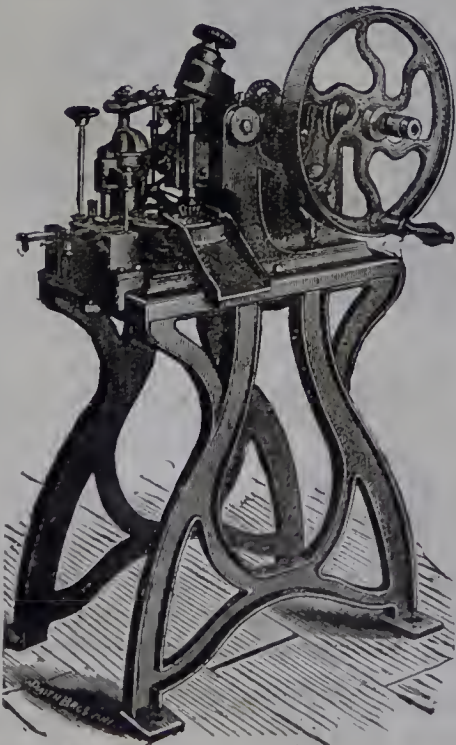


WILL BE EXHIBITED,  
**STAND 54,**  
 YORKS AGRICULTURAL SH W,  
 HARROGATE,  
 August 6, 7, and 8, 1890.  
 INSPECTION INVITED.

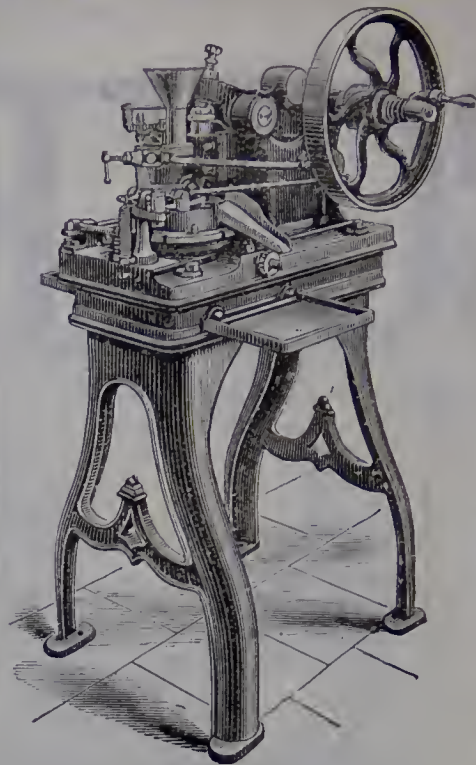
**WM. GARDNER**  
 ENGINEER, &c,  
**GLOUCESTER.**

## McFERRAN'S COMPRESSED TABLET MACHINES,

Of various Sizes and Prices.



Nos. 0, 1, 2, FOR POWER.  
 Nos. 4 & 5.—For Retail Druggists and Limited Manufacturing Purposes—  
 FOR FURTHER PARTICULARS ADDRESS—  
**J. A. McFERRAN, 1720 Green St., Philadelphia, U.S.A.**  
 Or J. HOLROYD & CO. (LIM.), MANCHESTER, Sole Licensees for the  
 Sale and Manufacture of these Machines in Great Britain.



Sole Licensees for Manufacture and Sale of McFerran's Improved  
 Automatic Machinery for Making  
**COMPRESSED TABLETS**  
 Of various shapes and sizes, from 1 gr. upwards.  
 Experts sent to fix and start Machines. Write for particulars and prices.  
**TOOLS FOR CAPSULE MAKING.** Machines Manufactured to Contract for Interior & Merchants

## JOHN HOLROYD & CO., LTD.

Engineers, Tool Makers, and Machinists,  
 TOMLINSON STREET WORKS,  
**HULME, MANCHESTER.**

## HAMILTON & CO.'S SHEEP DIP.

Concentrated Non-poisonous Soluble Fluid.



1 gallon will dip 100 Sheep.

PER 5s. GALLON (drums free).

Special Terms and Discounts to the Trade.

Also Poisonous Powder Dip in packets. Paste Dip, or  
 Warbles Smear.

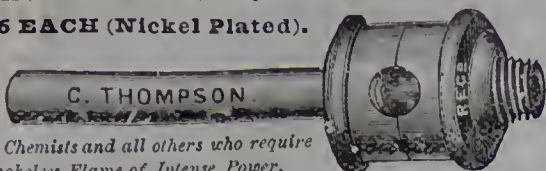
The Trade supplied at most liberal terms, without name  
 if des'ed. [1]

**HAMILTON & CO., WANDSWORTH, LONDON.**



## CHAS. THOMPSON'S ATMOSPHERIC GAS JET.

PRICE 1/6 EACH (Nickel Plated).

REGISTERED  
No. 147859.For the use of Chemists and all others who require  
a Small Smokeless Flame of Intense Power.EXCLUDE AIR.—An ordinary ILLUMINATING FLAME is obtained.  
ADMIT AIR.—For Sealing Wax purposes this BURNING FLAME is most useful;  
the impression produced from a seal is a far better colour than it is possible to produce with an ordinary gas-jet.ADMIT FINE QUANTITY OF AIR.—For Soldering purposes this powerful  
BLOWPIPE FLAME is invaluable to Jewellers, Dentists, and others.

Small Nickel-Plated Taps to fit the above Jets, 1/- each.

Registered Gas Bracket, as shown on page 133 in the summer number, 7/6 each  
complete, Nickel-plated. Write for descriptive circular.AGENTS—Maw, Son & Thompson, Bourne, Johnson & Latimer, Evans, Lescher &  
Webb, London. Southall Bros. & Barclay, Birmingham. Evans, Sons & Co.,  
Liverpool. Ralms, Clark & Co., Edinburgh. Glasgow Apothecaries Co., Glasgow.  
Boileau & Boyd, Dublin; and other Wholesale Druggists and Sundrymen; or fromCHAS. THOMPSON, Pharm. Chemist, Sparkbrook, Birmingham.  
On receipt of Postal Order or Stamps, 2d. extra.

## DISPENSING BOTTLES &amp; PHIALS

The following are our present Greatly Reduced Prices for not  
less than 3 gross of assorted sizes:—

|                               | Per Gross. |                 | Per Gross |
|-------------------------------|------------|-----------------|-----------|
| 6 & 8 oz., Plain or Graduated | 8/6        | 1-oz. Phials .. | 3/6       |
| 3 & 4 oz. " "                 | 7/6        | 1-oz. " ..      | 3/9       |
| 12-oz. " "                    | 12/-       | 1 1/2-oz. " ..  | 4/6       |
|                               |            | 2-oz. " ..      | 5/3       |

Packages, 1/ each, allowed for if returned.

## I. ISAACS &amp; CO.

GLASS BOTTLE MANUFACTURERS.

25 Francis St., Tottenham Court Road LONDON  
153 Upper Thames Street

BANKERS: LONDON AND WESTMINSTER BANK.

## PETROLEUM JELLY

WHITE, RED, and YELLOW—Best and Purest.

Consistency suitable for all Climates, and pronounced by the MEDICAL PROFESSION to be UNSURPASSED,  
Tins of all sizes, from 1 to 10 lbs.; Iron or Wood Kegs, 1/4, 1/2, and 1 cwt.; Barrels about 3 cwt., &c. Samples and prices on  
application, stating packages and quantities required, to the Manufacturers—

SNOWDON, SONS &amp; CO., STEPNEY, LONDON, E.

SPECIAL TERMS TO LARGE BUYERS.

S <sup>0</sup>/<sub>56</sub> V <sup>0</sup>/<sub>60</sub> R  
19/2 19/8CASH  
WITH  
ORDER.49 CLERKENWELL  
ROAD, LONDON, E.C.THE  
CHEAPEST HOUSE  
FOR METHYLATED SPIRIT

TREBLY DISTILLED BY OURSELVES.

PERFECTLY PURE.

FIT FOR ANY  
PURPOSE.ST. ANDREW'S  
DISTILLERY,S <sup>0</sup>/<sub>64</sub> V <sup>2</sup>/<sub>3</sub> MJars, 2-gallon, 2/6; 3-gallon, 3/; 4-gallon, 4/  
Drums, 5-gallon, 3/6; 6-gallon, 4/; 10-gallon, 8/.JAMES  
BURROUGH, S. V. R.65  
o.p. 60  
o.p.

CALE ST., CHELSEA, S.W.

and Methylated Spirit  
AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

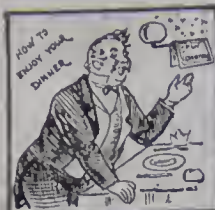
## METHYLATED SPIRIT &amp; FINISH

Supplied of the best quality in wholesale quantities by

J. &amp; W. HARVEY &amp; CO., Distillers, Yoker, GLASGOW.

LONDON AGENTS—JAMES CHAMBERS &amp; CO., 23 BIRCHIN LANE, CORNHILL, E.C.



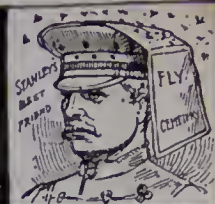


PROTECTED BY LETTERS PATENT.

# "Catch more Flies in a day, than the old fashioned papers do in a week."

## THE "FLY CEMETERY"

Free from Poison. Annual sale millions. Liberal Terms.  
Manufacturers, TUNBRIDGE & WRIGHT, Reading.



## COLTHURST & HARDING,



BALL DENOTES  
COLOUR OF PAINT.

BRISTOL—Manufactories: Phoenix Wharf and Temple Gate. Offices: Temple Gate. Telegrams: "Phoenix Bristol."

LONDON—Manufactory: Alpha Works, Millwall E. City Office: 16 Fish Street Hill, E.C. Telegrams: "Alpha Brand London."

**HARD LUSTROUS ENAMEL,**  
IN ALL THE ART SHADES.

For all kinds of decoration on Wood or Iron. Dry with a surface like Porcelain. Sold in small or large Tins, or in bulk. Prices and shades on application.

**WHITE LEAD, ZINC WHITE,**  
**PAINTS & COLOURS** OF ALL KINDS.

**MIXED PAINTS READY FOR USE,**  
In Tins, 1, 2, 4, 7, and 14 lbs. each.

**HIGH-CLASS VARNISHES**

Of all kinds, for Coachbuilders, Decorators, &c. OIL BOILERS, REFINERS, & MERCHANTS Report Orders receive special and prompt attention.

## WILKIN'S

# COMPRESSED DIP FOR SHEEP AND LAMBS.

A NEW & MOST EFFICIENT PREPARATION  
THE CHEAPEST DIP IN THE MARKET.

In blocks, each sufficient for twenty sheep. Carriage Paid and Cases Free on lots of six dozen.

TERMS ON APPLICATION.

Manufactory—27 KING ST., WHITEHAVEN.

SILVER MEDAL  
I.H.E. 1884.



THE ONLY  
MEDAL AWARDED  
FOR THIS  
SPECIALITY

# CHLORIDE OF LIME!

IN AIRTIGHT WATERPROOF & ODOURLESS PACKAGES  
INVENTORS AND MANUFACTURERS **NATIONAL CHEMICAL CO., LONDON**

THE N. C. CO. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.  
SEE THEIR PRICE LISTS

SILVER MEDAL  
I.H.E. 1884.



BEWARE  
OF OTHER SO-  
CALLED AIRTIGHT  
PACKAGES

Used on the Royal Farms at Windsor, Osborne, and Sandringham, and by the principal Stockbreeders everywhere for nearly 60 years.



# DAY, SON & HEWITT'S HORSE, CATTLE, AND SHEEP MEDICINES.



### THE CHEMICAL EXTRACT.

For assuaging pain and inflammation in all wounds, saddle galls, strains, bruises, swellings, and relaxed tendons in Horses. For painting after calving and lambing, and for swollen udders and sore feet.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE RED DRENCH.

Celebrated for inflammatory disorders, such as fevers, pleurisy, foot-and-mouth complaints, yellows, surfeit, and red-water. Also for difficult calving and lambing. Admirably adapted for cleansing and checking feverish symptoms in Cows and Ewes after a bad time of parturition.

For Sheep, 3s. 6d.; for Cattle, 18s. per dozen Box.

### THE GASEOUS FLUID.

Unmatched for colic or gripes and debility in Horses, for colds, chills, shivering fits, flux and diarrhoea in Cattle, Calves, and Sheep. For Ewes weakly after lambing and blown Cattle and Sheep, its effects are marvellous.

20s. per dozen Box.

### THE GASEODYNE.

Used as a standard in uncontrollable spasmodic pains and violent bowel complaints. Invaluable for parturition in Mares, Cows, and Ewes.

8s. 6d. per Bottle; 1-dozen Box, 10s. 6d.

### THE RED PASTE BALLS and RED POWDERS.

For ill-conditioned Horses and Colts; invaluable after hard hunting or driving. For coughs, colds, staring coat, itching, swollen legs and want of strength. The powder given in the feed will produce fine appetite and tone.

7s. 6d. per dozen; 3-dozen Box, 21s.

### THE BLACK PHYSIC BALLS.

These Balls are matchless for thoroughly cleansing the system of all impurities, and for assisting in the expulsion of Worms. Their purgative action soon relieves Costiveness of the Bowels, and checks all Feverish Symptoms arising from gross habit.

Price, 8s. per dozen; Box containing 3 dozen, 23s.

### THE BRONCHOLINE.

The great and reliable remedy for Husk or Hoarse in Cattle, Heifers, Calves, and Sheep. Its gaseous odour destroys the worm or parasite in the windpipe, removes the hard cough, and soothes the lungs and other organs.

2s. 6d. per Bottle; 1-dozen Box, 7s. 6d.

### THE "KEY TO FARRIERY."

A small work published by us on the general ailments of stock, their treatment and cure.

Large Edition, in Cloth, 2s. 6d.; Small Edition, 1s.

|                                                                                                                                           | Price  |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------|
| The Stockbreeder's Medicine Chest. No. 1 contains a complete assortment of all our preparations for treating diseases of stock generally, | 26 6 0 |
| The Stockbreeder's Medicine Chest. No. 2 is suitable for ordinary Farm use, and contains a useful selection of the above Medicines        | 2 16 0 |
| The Horsekeeper's Medicine Chest. No. 3 is arranged for large Horse Owners, Collieries, &c., and contains 12 specially selected Medicines | 5 6 6  |
| The Horsekeeper's Medicine Chest. No. 4 contains a smaller assortment, but has everything requisite for all ordinary ailments in Horses   | 2 17 6 |

Prepared only by DAY, SON & HEWITT, 22 DORSET STREET, LONDON, W.

LIBERAL DISCOUNT TO FOREIGN BUYERS.

LIST AND PARTICULARS OF AGENTS ON APPLICATION.





Under the Special Patronage of  
Her Majesty the Queen,  
H.R.H. the late Prince Consort,  
H.R.H. the Prince of Wales,



And Patronised by the Principal  
Noblemen, Landowners, and  
Agriculturists in the Kingdom.



## DOWN'S FARMERS' FRIEND

Has stood the test of upwards of 50 years, and is acknowledged to be the safest and most effectual preventive of SMUT IN WHEAT, BARLEY, OATS, &c., the Ravages of the Slug, Grub, and Wire-worm, and the Incursions of Rooks and Vermin.

It will also promote the Germination and Growth of the Seed Corn, and increase the produce of the Crop equal to a Change of Seed. A Ninepenny Packet is sufficient for Six Bushels of Seed, which can be Dressed and Fit to Sow in a Quarter of an Hour.

"Down's Farmers' Friend," in Boxes containing 3, 6, & 12 dozen Packets. 20/, 40/, 80/ each Box.

Manufactory—WOBURN, BEDS.

CAUTION.—Each Packet of the Farmers' Friend bears a facsimile of the Inventor's Signature.

*Henry Down*

# FOR ALL CANINE AILMENTS. SPRATTS PATENT, LIMITED, DOG MEDICINES.

Pamphlets on Canine Diseases for gratuitous distribution. Show Cards and Handbills Supplied.

Address: **SPRATTS PATENT, LIMITED, LONDON, S.E.**  
SPRATTS PATENT (AMERICA) LIMITED, 239 to 245 East 56th Street, NEW YORK, U.S.A.  
OR YOUR WHOLESALE HOUSE.

## ESTABLISHED 1840. DAY & SONS' AWARDED 40 PRIZE MEDALS. WORLD-FAMED HORSE & CATTLE MEDICINES. LARGEST SALE IN THE WORLD.



FOR Colic or Gripes in Horses and Cattle.  
FOR Debility and Chills in all Stock.  
FOR Scur in Calves and Lambs.  
FOR Hoven or Blown Cattle and Sheep.  
FOR Shivering Fits in Horses.  
FOR Weakness after Lambing or Calving.

PRICE—10/ PER HALF-DOZEN, OR 19/ PER DOZ. BOTTLES.



FOR Healing all Wounds in all Animals.  
FOR Kicks, Stake Wounds, Broken Knees in Horses.  
FOR Cracked Heels and Saddle Galls in Horses.  
FOR Sore Teats and Swollen Udders in Cows and Ewes.  
FOR Dressing and Anointing in Lambing and Calving.  
FOR Every Horse-keeper, Farmer, and Shepherd.

PRICE—2/6 PER BOTTLE.



FOR Fevers, Yellows, Indigestion, and Dullness  
FOR Red Water, Costiveness, and Mawbound.  
FOR Disordered System in Cattle.  
FOR Bad Cleansing after Calving.  
FOR Preventing Milk Fever and Inflammation.  
FOR Purifying and Increasing the Milk.

PRICE—12/ PER DOZEN PACKETS.



FOR Ill Condition, Off Appetite, Disordered System.  
FOR Heat-lumps, Itching, and Soury Skin.  
FOR Hidebound, Bad Water, and Blood Ailments.  
FOR Coughs, Colds, Sore Throats, and Fevers in Horses.

IN CANISTERS.

PRICE—3/6, 7/, 14/, AND 21/.

THE "ORIGINAL" UNIVERSAL MEDICINE CHEST, £2 4s. and £5. FOR ALL DISORDERS OF HORSES, CATTLE AND SHEEP.

Only Prepared by the Inventors, **DAY & SONS, Crewe, Cheshire, ENGLAND.**

Exporters are invited to apply for terms. Liberal Discount offered.



**HORN & SON**

OFFICES FOR BRITISH AND FOREIGN

**PATENTS AND TRADE MARKS,****SOMERSET CHAMBERS, 151 STRAND, LONDON**  
(NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration gratis.

**CO-OPERATIVE Society (with Varying Capital) of****TORRENTS CORKS****HEAD OFFICE—BOULOU (PYREES. OR.), FRANCE,**  
Price List forwarded free on application.**S.V.R.**In 40-gallon returnable iron casks, pure tinned, with screw  
bungs, interchangeable brass taps and spanners for open-  
ing. Farina, Dextrin, Glucose, Alcohol absolut., Fusel  
Oil, Pear Oil, Lime-Soda-Lead-Acetates, Verdigris, Acetic Acid, Wood  
Naphtha, Oharecoal, Ammonia liquid 880-900, anhydrous, Sodium Sulphide  
Nitrite 96/98 %, Bromides, Iodides, Chloralhydrate, Boracic Acid, Sul-  
phate of Copper, Permanganate of Potash, Ol. Caryophyll., Mentb. Pip.,  
Pini, Juniperi.**HUGO LORENZ, 7, 8 Idol Lane, LONDON, E.C.****GROSGURIN'S ANTI-NEURALGIC POMADE**

THE ONLY INFALLIBLE RAPID CURE FOR

**NEURALGIA, HEADACHE, SCIATICA, RHEUMATISM**  
AND ALL NERVOUS PAINS.

Price per Post—France, 1/8; Abroad, 2/6 40 % discount to Chemists.

General Depot—**C. GROSGURIN, Wholesale Chemist,**  
19 Grande Rue de la Croix-Rousse, Lyons (France).**Ed. ACARD, Pharmaceutical First Class Chemist,**  
325 & 328 RUE ST. MARTIN PARIS.With an Entrepot at St. Mandé, near the enceinte of Paris, for  
Spirituuous Medicines and Oils,  
Principal IMPORTER and AGENT in France for the Leading ENGLISH  
and AMERICAN MANUFACTURERS of PHARMACEUTICAL SPECI-  
ALITIES, is open to arrange with Firms desirous of Manufacturing in  
France. Samples and Prices of Saleable Goods invited. References to  
the best London and New York Houses.E. A. has an extensive and influential connection, and can buy  
French Patent Medicines cheaper than any other firm with 2 per cent.  
commission for cash payments.**ASTHMA—PAPIER FRUNEAU**

THE ONLY ANTI-ASTHMA PAPER

which received an award at the Paris Universal Exhibition, 1889, all the  
various powders and liqueurs being excluded even from exhibiting.**40 YEARS OF SUCCESS.**

TO BE OBTAINED FROM ALL LEADING CHEMISTS.

**G. JOZEAU, French Chemist, 49 Haymarket, London, W.**  
**E. FOUGERA & CO., 30 North William St., NEW YORK, U.S.A.**

ESTABLISHED 1855.

**SANFORD & SON**

MANUFACTURERS, SANDY, BEDS

Sole Proprietors of Sanford's Celebrated **RAT POISON**, with-  
out doubt the best ever introduced. Price, 6d., 1s., 2s., and 3s. per box.  
Also **MICE POISON**; cannot be excelled. In packets, 3d., 6d., and  
1s. each. Liberal terms to Chemists.Wholesale of **BARCLAY & SON, SANGER & SON, NEWBURY &**  
**SON, EDWARDS & SON,** and others, London.**HAND-PICKED GUM ARABIC.**Wholesale and Export Druggists before buying elsewhere  
should apply to**FREDK. FINK & CO.**

10 &amp; 11 MINCING LANE, LONDON, E.C.

**PURE WHITE BEESWAX**Guaranteed pure, of the best quality, in blocks, cakes, or other forms.  
Candles, and all other articles manufactured of Beeswax,  
at the lowest possible prices.

QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORT

**Lüneburger Wachsbleiche Wax Bleaching Works,**  
LUNEBURG (GERMANY).**OL. LAVAND. RECT.**  
(DURRANT).This is the only real substitute for Mitcham Lavender. 1 lb. 15/, ½ lb. 8/,  
¼ lb. 4/3. 1 lb. sent post free, with first-rate formula for Lavender Water,  
for 15/6.**G. R. DURRANT, Perfumer, HERTFORD.****KURWA TEL (Registered),**AN INDIAN MEDICINAL OIL, will be found a most effectual remedy for  
RHEUMATISM, GOUT, CHILBLAINS, LUMBAGO, and all CHEST  
COMPLAINTS. Sold in bottles by the Importers and their appointed Agents, at  
1/-, post free 1/1½.Acknowledgments of benefits derived from its use have reached us from Ministers,  
Medical Officers, and grateful mothers, from all parts of the country. Tea  
samples on application.**THE INDIAN TEA PLANTERS' COMBINATION, Fenchurch House,**  
7 Fenchurch Street LONDON, E.C.

Agents wanted where not already represented.

**IVORINE.**This absorbent Cream protects the Skin from unpleasant effects of Sun Heat, Cold  
Winds, Hard Water, &c. Complexions eruptive or impaired by using p-wder or  
irritant cosmetics become purified and healthful.Miss Ellen Terry writes:—"I find Ivorine the very best thing I have ever had to  
correct a dry skin." Miss Kate Santley writes:—"I have pleasure in saying Ivorine  
is admirable for the skin, and can confidently recommend it." Miss Fortescue  
writes:—"Ivorine is most pleasant, and preserves the skin, particularly when  
exposed to cold east winds." Miss Neilson writes:—"Ivorine is excellent for  
keeping the skin smooth, and shall certainly continue to use it."

Sold at 1s. 6d. a Box, to Trade 12s. per dozen.

Manufacturers—**MORSE & CO., 3 Wood Street, BATH.**One of the most valuable recent Inventions for the Preservation  
and Improvement of Health.

Sells very readily. No Chemist should be without one in stock. Retail Price 10s.

SOLE LICENSEES—

**ELLIS & CO., LIM., 47 FARRINGTON ROAD, LONDON, E.C.****ROBINSON'S** THE BEST IN THE WORLD.

Wholesale of

**SANGER & SON,**  
Oxford Street,  
and**MAY & ROBERTS,**  
Clerkenwell Road,  
LONDON.**FAMILY****PILLS.**

TRY THEM!!

**WATERPROOF ACCOUCHEMENT SHEETS**

Manufactured for the Patentee by

**ROBINSON & SONS,**Manufacturers of Antiseptic and Absorbent Lints, Cotton Wools, Gauzes,  
and Roll Bandages.**WHEATBRIDGE MILLS, CHESTERFIELD,**

And 55 Fenn Street, Aldersgate Street, London, E.C.

Is invaluable  
to all  
Chemists  
for Printing  
Price Lists,  
Circulars, &c.

Price from 25s. to 42s. complete.

Apply for Descriptive List and Specimens of Work to the  
**CYCLOSTYLE CO., 79a Gracechurch St., London, E.C.**



**Jn. GIRAUD FILS**  
FINE PERFUMERY AND TOILET SOAPS,  
GRASSE, FRANCE.  
FIRST PRIZES AWARDED AT EVERY EXHIBITION.  
Large Gold Medal at Nizza, 1884. LARGE GOLD MEDAL, with Special Mention, at  
the Melbourne International Exhibition, 1883-1885.  
SPECIALITY.—Essences, Toilet Waters, Extraits and Soaps à la  
Violette de Nies et de Grasse.

*Fletcher's*  
**Hydrobromates**  
Supplied in Original Bottles ready for  
Patient's use (stamped), to retail at 4/6  
each; also in 1-lb. Bottles for Dispensing,  
by the Sole Manufacturers:—  
Fletcher, Fletcher  
& Stevenson,  
21 Mincing Lane,  
London, E.C.

**STOWER'S**  
**LIME JUICE CORDIAL**  
(no musty flavour)  
As supplied to Her Majesty and both Houses of Parliament.  
700 Medical Testimonials. Good Steady Demand.  
Sole Proprietors—A. RIDDLE & CO., 38 Commercial Street, London, E.

**MOUILLA LIQUID SOAP**  
The invention of Dr. DUNCAN, St. Petersburg.  
Beautifully Transparent Golden Colour. Delicately Perfumed.  
As prescribed by most eminent Skin Physicians.—See Testimonials.  
In handsome bottles with sprinkler tops. Retail, 6d. and 1/6  
per bottle. Wholesale terms on application to  
The Mouilla Liquid Soap Co., Ltd., 6 Adam St., Strand, W.C.

**S.V.R. S.V.METH.**  
AB. ALCOHOL. SHERRY AND ORANGE WINES.  
Lowest Prices, Best Quality.  
DUTTON STREET DISTILLERY, MANCHESTER  
A. MACNAIR & CO.

**Critchley's**  
**Starch-Gloss**  
Prepared only  
by  
**T. CRITCHLEY,**  
BLACKBURN, and  
2, BEECH STREET,  
LONDON, E.C.  
Makes Starched Linen like new. Does not stick to spider-like Materials.  
Once tried always wanted. Used in the Royal Landdries. Sold every-  
where, in packets, 1d., 3d., 6d., and 1s. each. Write for quotations.

**TO COUNTRY CHEMISTS.**  
Send for our NEW SAMPLE PARCEL of  
**SALEABLE NOVELTIES** for the **MILLION**  
HALF PROFIT. ENORMOUS DEMAND.  
Free by Parcels Post for Six Stamps.  
**THE GLOBE CHEMICAL CO., 336 CITY ROAD, LONDON, E.C**

**ALL CHEMISTS**  
Who stock and introduce to the notice of their customers the new remedy for  
Skin Diseases, known as  
**ANTECZEMA,**  
Will always find that it commands a ready Sale. It never fails to cure, and recom-  
mends itself. The preparation is a bland, soothing cream made by an entirely  
new and complicated process, and is perfectly harmless and non-poisonous.  
In Bottles at 2s. 9d., Wholesale of F. NEWBURY & SONS, or of the  
Sole Agent—R. C. LAYNG, Chemist, 93 Finsbury Pavement, E.C.

**GREENSILL'S**  
ORIGINAL  
**MONA BOUQUET.**  
Wholesale and Shipping Terms sent on application to the Sole Manufacturers—  
**GREENSILL & SON, DOUGLAS.**  
ESTABLISHED 1852.

**EMP. ADHÆSIVUM OPT.**  
16 INCHES WIDE.  
On Glazed Calico, 2/9; on Shirting, 4/3 per doz. net cash.  
**JOHN QUILLIAM & CO.,** Plaster Works, Manchester.  
Cowburn Street, [3]

# W. SUTTON & CO.

76 CHISWELL STREET, late 10 Bow Churchyard, LONDON;

SOLE MAKERS OF THE

## ORIGINAL BATEMAN'S DROPS & DAFFY'S ELIXIR.

Proprietary Medicines, Perfumery, Mineral Waters, Lozenges, Druggists' Sundries, and Miscellaneous Articles.

PRICE LIST FREE ON APPLICATION.

### PROVISIONAL PATENT.

## TEBBUTT'S COMBINED PERCOLATOR & PRESS,

For the Preparation of Tinctures, Fluid Extracts, & Concentrated Infusions,

Supplies a long-felt want, the methods hitherto employed being wasteful and unsatisfactory. The  
results of its use are an exhausted Marc and a superior Preparation, with absolutely no loss of Spirit

### TESTIMONIAL.

MR. TEBBUTT.  
Tower Chambers, Moorgate Street, E.C., September 12, 1889.  
Dear Sir,—We have much pleasure in telling you that your patent Percolator has given us very great satis-  
faction. We find that the marc, whether it be that of a Tincture, Fluid Extract, or Concentrated Infusion, is  
thoroughly exhausted after percolation is complete, also that there is a great saving of spirit.  
We may add that at the last meeting of the British Medical Society, held lately in Leeds (August, 1889), we  
exhibited our Fluid Extracts made with your Percolator, and they attracted a great deal of attention by their  
excellence.—Vide "British Medical Journal," Sept. 1; and "Provincial Medical Journal," Sept. 2  
Yours truly, CHAS. GREEN & CO.

PRICES WITH STAND COMPLETE:—

To make ½ gall. of Tincture, such as Gentian, 15/6. To make 1 gall. of Tincture such as Gentian, 22/6

Orders should be accompanied with a remittance, addressed to

**FRANK TEBBUTT, 54 Junction Rd., Upper Holloway, LONDON, N.**

